Study on "EU-US High Level Working Group"

Final report

Client: Ministry of Economic Affairs, Agriculture and Innovation

Rotterdam, 22 October 2012

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ECORYS

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List of abbreviations

ACC	American Chemistry Council
ACRE	Average Crop Revenue Election programme
AEO	Authorised Economic Operator
AF&H	Agrofood and horticulture
APR	Additional permissive reexports
ARRA	American Recovery and Reinvestment Act
ATSC	Advanced Television Systems Committee
AVE	Ad Valorem Equivalent
BAA	Buy American Act
BRIC	Brazil, Russian, India, China
BSE	Bovine Spongiform Encephalopathy
CAFE	Corporate Average Fuel Economy
CBS	Central Bureau of Statistics
CCF	Capital Constructions Fund
CDSOA	Continued Dumping and Subsidy Offset Act
Cefic	European Chemical Industry Council
CFIUS	Committee on Foreign Investment in the United States
CGE	Computable General Equilibrium model
CRF	Construction Reserve Fund
CSI	Container Security Initiative
CTHA	Chemical Tariff Harmonisation Agreement
C-TPAT	US Customs-Trade Partnership against Terrorism
DoD	United States Department of Defense
DS	Dispute Settlement
DSB	Dispute Settlement Body
DSU	Dispute Settlement Understanding
DVB-T	Digital Video Broadcasting
EAA	Export Administration Act
EADS	European Aeronautic Defence and Space Company
EAR	United States Export Administration Regulation
EC	European Commission
ECIPE	European Centre for International Political Economy
EPCA	European Petrochemical Association/ Energy Policy and Conservation Act
EU	European Union
EU MC	European Union Military Committee
EURATOM	European Atomic Energy Community
EZ	Economic Affairs (economische Zaken)
FAR	Federal Acquisition Regulation
FAS	Foreign Agricultural Service
FCC	Federal Communications Commission
FCT	Foreign comparative tests
FDA	Food and Drug Administration
FDI	Foreign Direct Investment
FINSA	Foreign Investment and National Security Act
FMSR	Foreign Military Sales Regulation
FMVSS	Federal Motor Vehicle Safety Standards

FSC	Financial Services Commission
FTA	Free Trade Agreement
FY	Fiscal Year
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GI	Geographical indications
GSM	General Sales Manager
GTAP	Global Trade Analysis Project
GTP	General Preferential Tariff
HLWG	High Level Working Group on Jobs and Growth
HTSM	High Tech Systems & Materials
IATTC	Inter-American Tropical Tuna Commission
ILSA	Iran and Libya Sanctions Act
INPA	Iran Non-Proliferation Act
IPR	Intellectual Property Rights
IRS	Internal Revenue Service
ITAR	International Traffic in Arms Regulations
ITC	International Trade Centre
LCA	Large Civil Aircraft
MAcMAP	Market Access Map
MADB	Market Access Database
MARAD	Maritime Administration
MEP	Member of European Parliament
EA&I	(Ministry of) Economic Affairs, Agriculture and Innovation
MNE	Multinational Enterprise
MTN	Multilateral Trade Negotiation
NAFTA	North American Free Trade Agreement
NASA	National Aeronautics and Space Administration
NL	Netherlands
NRTL	Nationally Recognised Testing laboratory
NTM	Non-Tariff Measure
ODS	Operating Differential Subsidy
OECD	Organisation for Economic Co-operation and Development
OIE	World Organization for Animal Health
OSHA	Occupational Safety and Health Administration
PRA	Product-Risk Assessment
R&D	Research and Development
REACH	Registration, Evaluation, Authorisation and Restriction of Chemical substances
ROW	Rest of the World
RTA	Regional Trade Agreements
SBA	Small Business Administration
SBI	Dutch Standaard Bedrijfsindeling (Dutch Industrial Classification of Standards?)
SCGP	Supplier Credit Guarantee Program
SCM	Agreement on Subsidies and Countervailing Measures
SDoC	Suppliers' Declaration of Conformity
SME	Small and Medium Enterprise
SPS	Sanitary and phytosanitary measures
TABD	Transatlantic Business Dialogue
TANFTA	Transatlantic NTM FTA

TAP	Trans Atlantic Partnership
TBT	Technical Barriers to Trade
TCE	Trade Cost Equivalent
TEC	Transatlantic Economic Council
TKI	Top Consortium for Knowledge and Innovation
ToR	Terms of References
TPN	Transatlantic Policy Network
U.S.C.	United States Code
UN COMTRADE	United Nations Commodity Trade Statistics Database
UNECE	United Nations Economic Commission for Europe
US	United States of America
USAF	United States Air Force
USDA	United States Department of Agriculture
USTR	United States Trade Representative
WTO	World Trade Organisation

Executive Summary

Background and objective of the study

The European Union (EU) and the United States (US) have a long-standing relationship on several levels (economic, political, etc.), and their economies are strongly intertwined with large bilateral trade and investment flows. During the last EU-US Summit in November 2011, the Transatlantic Economic Council (TEC) was requested to create a High Level Working Group on Jobs and Growth (HLWG), to identify and assess policies and measures to further increase EU-US trade and investment. The HLWG will report its findings and recommendations to both US and European leaders by the end of 2012. This study aims to contribute to the HLWG discussions by presenting a clear overview of trade measures that can be aligned and the economic consequences for both the Netherlands and the EU of an FTA between the EU and US. By doing so, the study aims to provide the Dutch Government with relevant inputs for the HLWG discussions on further cooperation between the EU and the US.

Approach

The approach and methodology of the study are based on the following four steps:

1. *Step 1: Assessment of the effects of a potential EU-US FTA for the Netherlands*, both at a macro and sectoral level, on the basis of two previous Ecorys studies and additional analyses;
2. *Step 2: Selection of top sectors for further focus*, on the basis of four selection criteria;
3. *Step 3: Identification of most important US trade barriers for Dutch (and EU) business*, through desk study and stakeholder consultation;
4. *Step 4: Formulation of policy recommendations*, based on the conclusions from step 1 to 3.

Economic effects of an EU-US FTA

The effects of an EU-US FTA are based on two recent studies that use different assumptions and liberalisation scenarios. The EU-US FTA study (2009) looks at liberalisation in the area of tariffs, barriers to services trade and NTMs, but does not model specific effects of individual NTMs. The EU-US NTM study (2010) specifically addresses the effects of NTM liberalisation, but does not model tariff or services barrier reductions. As this latter study only looked at the effects for the EU and US, additional analysis has been conducted to identify the effects for the Netherlands.

Both studies predict significant positive results at macro-level for the US, EU and the Netherlands. For the Netherlands, the expected annual increase of national income ranges from €1.4 billion to €4.1 billion. The following table shows the results from the two studies for a selection of macro-indicators.

Table 1.1 Macro-effects of EU-US trade liberalisation, selected indicators

Comparison of outcomes		EU-US NTM study (DG Trade), including new results		EU-US FTA study (EZ)
		Ambitious NTM reduction, Long run	Limited NTM reduction, Long run	Long run
Real income, bn Euro	European Union - 26	117.4	51.7	34.9
	The Netherlands	4.1	1.8	1.4
	United States	40.8	18.3	24.1
Value of exports, % change	European Union - 26	2.03	0.88	1.6
	The Netherlands	1.69	0.76	1.3
	United States	6.06	2.68	5.7
Value of imports, % change	European Union - 26	2.01	0.88	1.6
	The Netherlands	1.83	0.8	1.4
	United States	3.93	1.74	3.7
Terms of trade, % change	European Union - 26	0.07	0.03	-0.2
	The Netherlands	0.07	0.03	0.0
	United States	-0.23	-0.10	0.1

Note: EU26 is the EU minus the Netherlands.

The results at sectoral level are not fully comparable, as the two studies use a different aggregation of sectors. In the EU-US FTA study, Dutch sectors that are expected to gain most in terms of percentage output increase are iron and steel (5.6%), dairy products (2.5%), beverages and tobacco (2.1%) and petro- chemicals (1.7%). Other transport equipment (- 3.6%), meats -except beef- (-2.4%) and motor vehicles (-2.9%) are the sectors expected to contract most. In the EU-US NTM study, motor vehicles (5.7%), chemicals (2.2%) and insurance are expected to experience the largest increase in percentage terms, while electrical and other machinery (respectively -5.5% and -1.9%) are expected to contract most.

Selection of top sectors for further focus

Four criteria were used to select three top sectors for which a detailed assessment of main barriers to the US market would be made. These four criteria were: a) the share of the top sector's exports in total Dutch exports, b) the share of the top sector value added in total Dutch GDP; c) the existence of EU-US trade barriers in the topsector; and d) the benefits from aligning EU-US non tariff measures (NTMs) in the top sector. On the basis of these criteria, the following sectors were selected: 1) Agrofood and Horticulture; 2) High Tech Systems and Materials; and 3) Chemicals.

Trade barriers and priorities for selected top sectors

For each of the selected top sectors, the main barriers to the US markets were identified and prioritised, based on the importance attached to the barriers by the stakeholders and the relevance of the barrier for the sector (i.e. whether it is affecting the whole sector or only part of the sector). Below we present the main barriers and priorities for each of the selected top sectors.

For **Agrofood and Horticulture (AF&H)**, most barriers relate to the broader areas of customs and tariffs and health & safety requirements. The latter primarily relate to SPS measures which clearly constitute the main non-tariff barrier for trade with the US.[1] Mutual recognition or harmonisation of standards would therefore help to increase market access to the US. However, this will not be easy to achieve. Some barriers, like the ban on beef due to BSE, are unlikely to be removed, also given the EU measures in the sector. It will be important to be aware of the EU barriers to US products in order to assess what could be offered to the US in return for removing certain barriers. Although this applies to all sectors, it is especially relevant for the AF&H sector, given the support and protection this sector gets in the EU (notably through the Common Agricultural Policy).

For **High Tech Systems & Materials (HTSM)**, a large part of the relevant barriers (including restrictions and prohibitions) are taken on the grounds of national security. As there are many dual use products in the sector, these barriers have a significant effect. It will be very difficult if not impossible to remove these barriers, rather the focus should be on facilitating procedures, and increasing transparency and exchange of information. For a number of products in the sector, US standards also differ from EU or even international standards. Here too, it would be good to come to harmonisation or mutual recognition of standards. Increase in access to the market for government procurement is also relevant for the HTSM sector.

For **Chemicals**, tariffs constitute a barrier especially given the large amount of intra-industry trade in the sector. In addition, technical and health and safety requirements are important, and mutual recognition or equivalence of measures would greatly benefit the sector. It is also worth mentioning that stakeholders have pointed to an unequal playing field between the EU and the US due to EU policies, like the sugar quota which drive up sugar prices (sugar is an important input for the chemical industry) and the relatively more strict rules in the EU for state aid compared to the US.

Policy recommendations

The above already contains some sector-specific policy recommendations. If we look at the policy recommendations at a more general level, the following two general barriers appear to be most important to the top sectors: 1) differences in regulations and standards (whether they relate to health and safety or technical measures); and 2) import duties. With respect to the first barrier, the problem is usually not that the standards are difficult to meet (many indicate that EU standards are even higher), but that there are differences between EU and US standards, which cause additional costs and prevent economies of scale, and/or that efforts are needed to prove compliance with the US standards and requirements. The lack of transparency on the requirements itself or the process to get approval for exports or investment to the US also causes uncertainty and extra costs for Dutch companies. It should be stressed that many of the barriers have a long history and/or are part of the culture in the US, and they are unlikely to be eliminated completely. Rather, the goal should be to increase transparency, simplify procedures and reduce the time needed for approval processes, etc.

Tariffs are also identified as priority barriers, notably for AF&H and Chemicals. Although in general they are already low, for some specific products they can be higher and especially in subsectors where margins are small, tariff elimination can still be important.

[1] Differences in EU-US SPS measures are not given the highest priority, but medium priority, which can be explained by the fact that that there are also other, more specific SPS related barriers included in the table.

1 Introduction and main objective of this study

1.1 Rationale and aim of this study

The European Union (EU) and the United States of America (US) continue to be large economic powers in the global economy. Thanks to a long-standing relationship at several levels (economic, political, etc.), the EU and the US economies are nowadays strongly intertwined and account for large bilateral trade and investment flows. The Netherlands, being very open and an important trading country within the EU economy, is strongly affected by the relationships with the US. An open and favourable trade and investment climate and strong mutual relationships between the EU and the US are thus critically important not just for the US and EU as a whole, but for the Netherlands in particular.

The global trade and investment environment has changed significantly since the 1990s. Firstly, Regional Trade Agreements (RTA) have become increasingly important. Secondly, in line with the overall decrease of 'conventional' tariffs (ad valorem tariffs), focus has increasingly shifted to the tackling of Non-Tariff Measures (NTMs) to trade and investment flows. This is especially the case for economies with a similar level of development and a trade relationship with a strong focus on trade in services and FDI.

Due to the enormous potential of intensified relations between the EU and the US in this changing environment, US President Obama and the European Commission and European Council Presidents Barroso and Von Rumpuy have instructed the Transatlantic Economic Council (TEC) to create a High Level Working Group on Jobs and Growth (HLWG). These two bodies have been created with the aim to identify policies and measures to increase EU-US trade and investment. The HLWG will report its findings and recommendations to both US and European leaders by the end of 2012. The Netherlands is in the position to support the HLWG both politically and in terms of content. In addition to identifying and assessing options with high potential for strengthening the EU-US trade and investment relationship to create economic growth and employment in general, the Netherlands also specifically has ample opportunities to benefit from the developments and opportunities discussed in the working group.

One of these promising opportunities lies in the possibility of an EU-US Free Trade Agreement (FTA), from which the Netherlands with its relatively open economy could gain significantly. In order to assess the economic impacts resulting from such an FTA for the Netherlands, but also in order to get a complete picture of the interests for the EU and the US, Ecorys has already conducted a study[2] that identifies potential effects of a 'standard' FTA. However, due to the increased importance of non tariff measures and the concomitant decline in significance of tariffs in international trade, this study has potentially underestimated the likely effects of an FTA. A second Ecorys study[3] on the effects of aligning non-tariff measures in EU-US trade fills this void, but does not specifically outline separate results for the Netherlands and the rest of the European Union.

The present study combines both approaches by reporting the effects for the Netherlands of an EU-US FTA as per the Ecorys (2009) study, and by re-estimating the economic impacts of non-tariff measure removal for the Netherlands specifically, based on the results of EU-US alignment exercise of the Ecorys (2010) study. In this way, the study aims to contribute to the HLWG

[2] Ecorys Nederland B.V. (2009): The impact of Free Trade Agreements in the OECD. The impact of an EU-US FTA, EU-Japan FTA and EU-Australia/New Zealand FTA.

[3] Ecorys Nederland B.V. - NEI (2010): Non Tariff Measures in EU-US Trade and Investment. An Economic Analysis.

discussions by presenting a clear overview of trade measures that can be aligned and the economic consequences for both the Netherlands and the EU of an FTA between the EU and US. By doing so, the study aims to provide the Dutch Government with relevant inputs for the HLWG discussions on further cooperation between the EU and the US.

In order to obtain a comprehensive picture of the potential gains of trade liberalisation in the sectors that are most important for the Dutch economy, the results will also be translated into sector-specific impacts. This will be done to the extent possible for the nine Dutch 'top sectors' that are defined in the sector policy of the Dutch government as economic clusters with internationally recognised strengths.

1.2 Structure of the study and methodology

The approach and methodology of this study is based on the following four steps:

1. *Step 1: Determine effects of a potential EU-US FTA for the Netherlands*
   In Step 1, we look at the effects for the Netherlands of a potential EU-US FTA at both macroeconomic and sector level, which is relevant for Dutch businesses. The emphasis in this exercise should lie on the aspects and model specifications that are currently used by the European Commission (DG Trade) in its assessment of trade policy impacts. As such the Ministry of EA&I will stay close to the negotiation position and information that DG Trade uses, which allows the Dutch government to adequately contribute to the discussions on non-tariff measures. The methodology used for this part of the study is further elaborated below;
2. *Step 2: Selection of top sectors for further focus*
   In Step 2, three relevant top sectors in the Netherlands which are expected to be especially affected by a potential intensification of the trade relationship between the EU and the US are selected for further analysis in step 3;
3. *Step 3: Identification of Dutch (and EU) trade barriers that could be removed through an EU-US FTA*
   In Step 3, we aim to gather comprehensive information on non-tariff measures that affect the profitability, competitiveness and employment of Dutch businesses within the selected top sectors;
4. *Step 4: Policy recommendations*
   Step 4 builds on the conclusions from Step 1 to 3 and presents policy recommendations that follow from these steps.

The remainder of this section elaborates on the approach we take in each of the four steps.

1.2.1 Step 1: Quantitative determination of potential effects of EU-US FTA for NL

The quantitative-economic approach that we employ in the first step builds on the two Ecorys studies mentioned earlier (Ecorys, 2009[4]; Ecorys, 2010[5]) that assess the effects of an EU-US FTA and of NTM liberalisation, respectively. It aims to generate quantitative results that are relevant for the Dutch macroeconomic environment and Dutch businesses at sector-level and can inform the adoption and implementation of an NTM-oriented approach in the trade negotiations between the EU and the US.

[4] Ecorys Nederland B.V. (2009): The impact of Free Trade Agreements in the OECD. The impact of an EU-US FTA, EU-Japan FTA and EU-Australia/New Zealand FTA.

[5] Ecorys Nederland B.V. - NEI (2010): Non Tariff Measures in EU-US Trade and Investment. An Economic Analysis.

The first study (Ecorys 2009), commissioned by the then Ministry of Economic Affairs, has modelled a general tariff-services-NTM reduction strategy and presented its resulting effects. The second study (Ecorys 2010), commissioned by DG Trade, looked into a more ambitious NTM reduction strategy between the EU and US.

There are pros and cons of the methodological approaches of the two studies with respect to this present study. The most logical outcome at this time is that an FTA takes into account tariffs (as done in the Ecorys (2009) EU-US FTA study for EZ, but not in the Ecorys (2010) NTM study), but that the emphasis of the FTA is on addressing NTMs (as the NTM study has done in detail, whereas the EU-US FTA study has only done so in a more general sense). Furthermore, it is highly likely that the EC will use the Ecorys (2010) NTM study as an economic base for all further studies and analyses for policy formulation purposes. We believe that both previous studies have added value and should be used as a basis for our methodology in this study. In addition to interpreting the results of both previous studies for the Dutch context, additional quantitative analysis is done in order to break down the NTM study into the specific effects for the Netherlands and EU26 (EU minus the Netherlands).

In this additional quantitative assessment, the same two scenarios are assumed as in the original Ecorys (2010) NTM study. Both scenarios rely on the assumption that only 50 percent of total NTMs in a sector are actionable, i.e. can potentially be removed. The two scenarios are:

1. Ambitious scenario. All actionable NTMs are aligned (= 50 percent of total NTMs) – modelled both for the short and the long run;
2. Limited scenario. 50 percent of actionable NTMs are aligned (= 25 percent of total NTMs) – again both short and long run effects are modelled.

The country specification used contains the Netherlands, EU26, US and the Rest of the World (ROW).

The sectors for which results are reported are based on GTAP classification, provided the general equilibrium model has made use of GTAP 7.0 data. The original 57 GTAP sectors have been re-arranged and grouped for the purpose of the study into 20 aggregate sectors. Annex B presents these aggregated sectors and the original sectors that are grouped under each. In a later stage, the general equilibrium results for these 20 aggregated sectors are then ‘matched’ to the extent possible to the selected Dutch top sectors.

Results

In step 1 a summary of the quantitative results of the EU-US FTA study for the Ministry of Economic Affairs will be presented for the Netherlands, the US and the EU26. Moreover, the results of the adjusted Ecorys (2010) NTM study will be presented for the Netherlands, the EU27 and the US. This is done in Chapter 3.

1.2.2 Step 2: Selection of top sectors for further analysis

To the extent possible, the analysis in this study will be tailored to the nine top sectors that the Dutch government has selected as internationally competitive clusters on which it will focus its domestic industrial policy. Given the short time frame for this study, the ToR proposes to focus specifically on three out of these nine top sectors.

In Step 2 of the study we select these three sectors, which are going to be investigated further in the remainder of the study. This is done in close consultation with the client and by using the following four criteria:

1. Share of the top sector exports in total Dutch exports;
2. Share of the top sector value added in total Dutch GDP;
3. The existence of trade barriers in a sector;
4. The benefits from aligning EU-US NTMs in a sector.

In applying these objective criteria, there are two limitations that should be mentioned. Firstly, data on the Dutch top sectors are not readily available and the statistic specification of these sectors by Dutch government services is still on-going. This implies that matching the existing trade data that serve as input to this study to the top sectors is difficult. Secondly and in addition, trade data often deal with goods sectors only or specifically distinguish goods and services sectors. The Dutch top sectors, however, contain both goods and related services as sub-categories. As a result of these two limitations, it is difficult to directly present reliable figures for the four selection criteria at the level of top sectors.

Therefore, the results under the four criteria are presented in relative scores that rank the performance of the top sectors on each criterion. A top sector receives a “+” when it performs relatively well compared to other top sectors, a “+/-“when it scores average and a “-“when it performs poorly with respect to the other sectors. In order to arrive at these ratings, we use information from a variety of sources including trade data from GTAP and/or UN COMTRADE, the top sector information bulletins, CBS data and consultations with the Ministry. The third and the fourth criterion will be estimated based on the two Ecorys studies that form the basis of this report.

Results

Step 2 provides a relative score for all top sectors on the four proposed criteria as well as a final selection of the three top sectors that are investigated in more detail.

1.2.3 Step 3: Identification of actionable trade barriers in EU-US context

Step 3 identifies trade barriers that can actually be reduced through an EU-US FTA. As Ecorys has experienced in its previous studies, consultations with the sector itself are imperative in the determination of trade barriers. Businesses have the best overview of which issues prevent them from exporting, investing or importing. Step 3 therefore involves the following four tasks:

Task 1: Initial overview of trade barriers

First of all, a literature review identifies and provides an overview of the most important trade barriers. The European Commission (EC)Market Access Database (MADB) will constitute an important source of information for this. Additionally, the Ecorys (2010) NTM study on which the quantitative estimates are based is used as a source of information.

Task 2: Interviews with stakeholders

Based on the preliminary overview obtained during the first task, interviews are conducted with important stakeholders. The aim of the interviews is to complement the list of trade barriers. The interviewees will also be asked to indicate the most restrictive barriers and the potential gains. Representatives of the top sectors are approached, as well as large traders with the US and sector organisations in which the key stakeholders are organised.

Task 3: Consolidating interviews and qualitative results

The information from the various interviews are combined and used to compile a final list of trade barriers per top sector. These barriers are ranked in order of importance and priority.

Task 4: Validation of prioritised barriers in concluding sectoral workshops

Finally, workshops with 10 to 15 key stakeholders are organised per top sector. The main goal of these workshops is to validate and cross-check the obtained results and identified trade barriers. Additionally, the prioritised trade barriers receive special attention by considering the questions of what the probability is that these barriers can be removed is and how they can be removed/reduced in the discussions.

Results

The results of this third step include an overview of the main barriers to address by the Dutch Government for the three selected top sectors.

1.2.4 Step 4: Policy recommendations

The quantitative and qualitative analyses in steps 1, 2 and 3 result in a solid understanding of potential effects of an EU-US FTA for the EU and for the Netherlands (specifically for top sectors), and the trade barriers that should be overcome. Step 4 summarises these and presents main conclusions.

Based on these conclusion the policy recommendations focus on the identification of significant trade barriers that are suitable and sufficiently important to address in an EU-US FTA - in other words on those barriers that the Netherlands and the EU should specifically include in the negotiations. These policy recommendations are aimed at enabling the Ministry of EA&I to provide informed inputs and recommendations to the HLWG of the TEC.

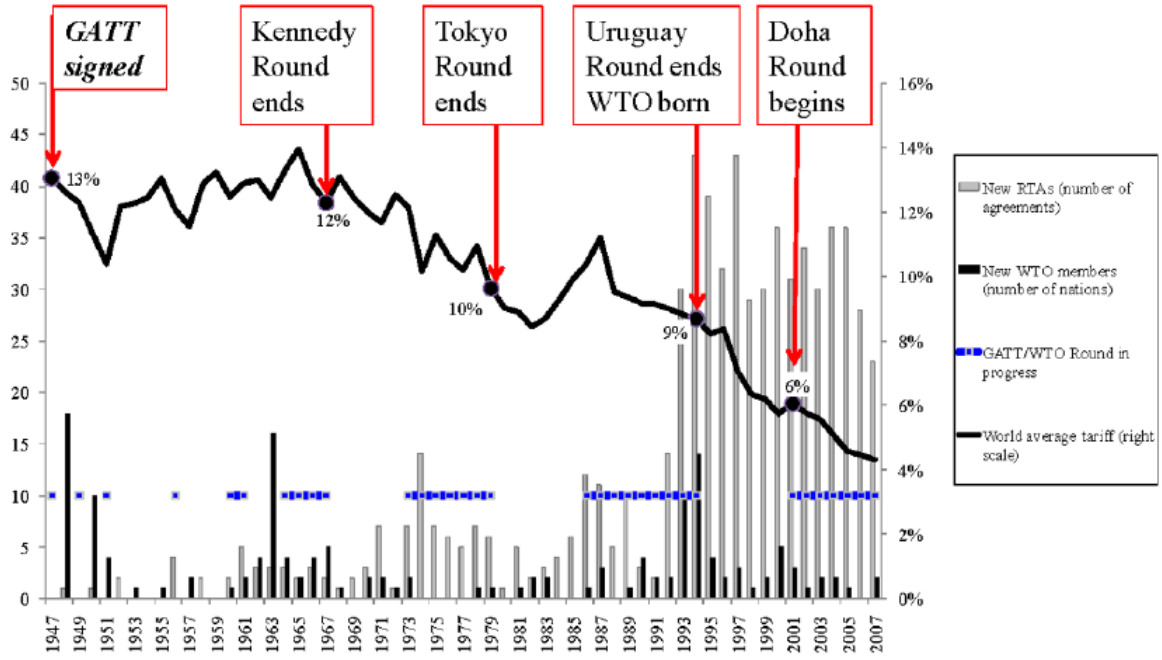
2 Context of EU-US trade relations

Since this study aims to address the impacts of a potential FTA between the European Union and the United States and distinguishes between the effects for the Netherlands, the EU and the US, it is imperative to understand the context in which any potential negotiations take place. This chapter provides an overview of the recent developments in the trade and investment environment of the EU and the US. It does so by discussing the changes in the latest trade policies (section 2.1), the global economic shift of power (section 2.2), and the current economic relation between the EU and the US (section 2.3).

2.1 Decline in importance of tariffs and continuing rise of regional trade agreements

Ever since World War II and the signing of the GATT in particular, there has been a rapid decline in tariff rates applied in the world. Figure 2.1 illustrates that global average tariff rates (right scale) have decreased from 13 percent in 1947 (signing of the GATT) to just over 4 percent in 2007. Apart from specific sensitive products and product categories, many general applied tariffs have been eliminated. Policymakers working in the current global trade environment should acknowledge that, relatively speaking, tariff rates are much less important than other (non-tariff) trade measures. Prior to advancing to the topic of (non-tariff) trade barriers, another clear trend that shapes the context of current trade environment should be outlined. Figure 2.1 also shows the various multilateral trade negotiations (MTNs) that have taken place and are still taking place. The grey bars indicate the rise of regional trade agreements (RTAs) since the mid-1990s, a trend that has gone hand in hand with the establishment of the World Trade Organisation (WTO) in 1995.

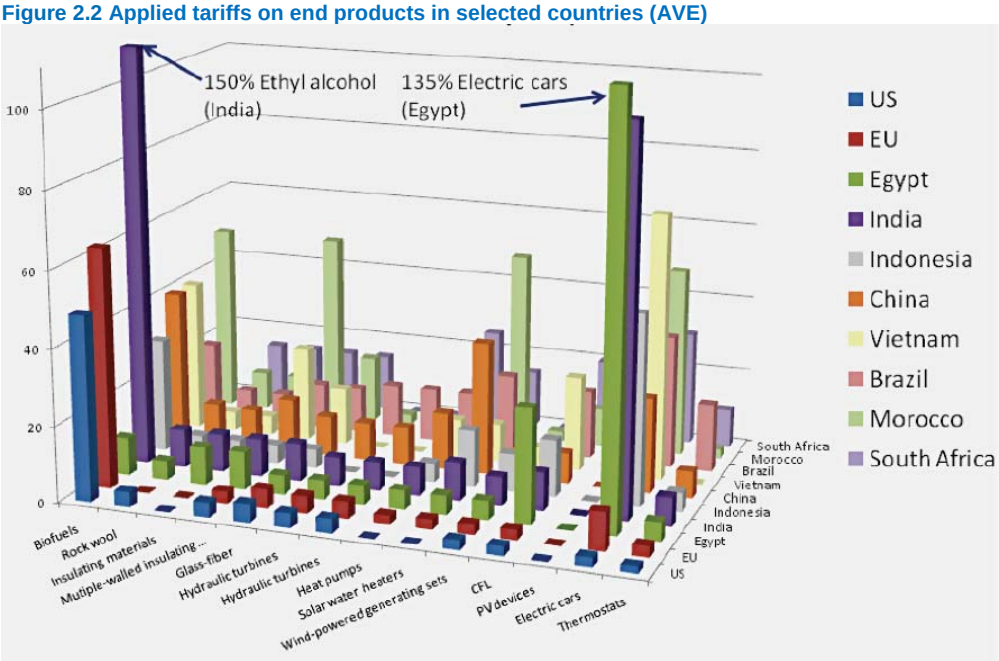
Figure 2.1 Tariff liberalisation from 1947: RTAs, MTNs and unilateralism



Sources: RTAs: WTO online database and Hufbauer-Schott RTA database; Tariffs: Clarkson and Williamson (2004) until 1988, after that World DataBank (weighted tariffs – all products).

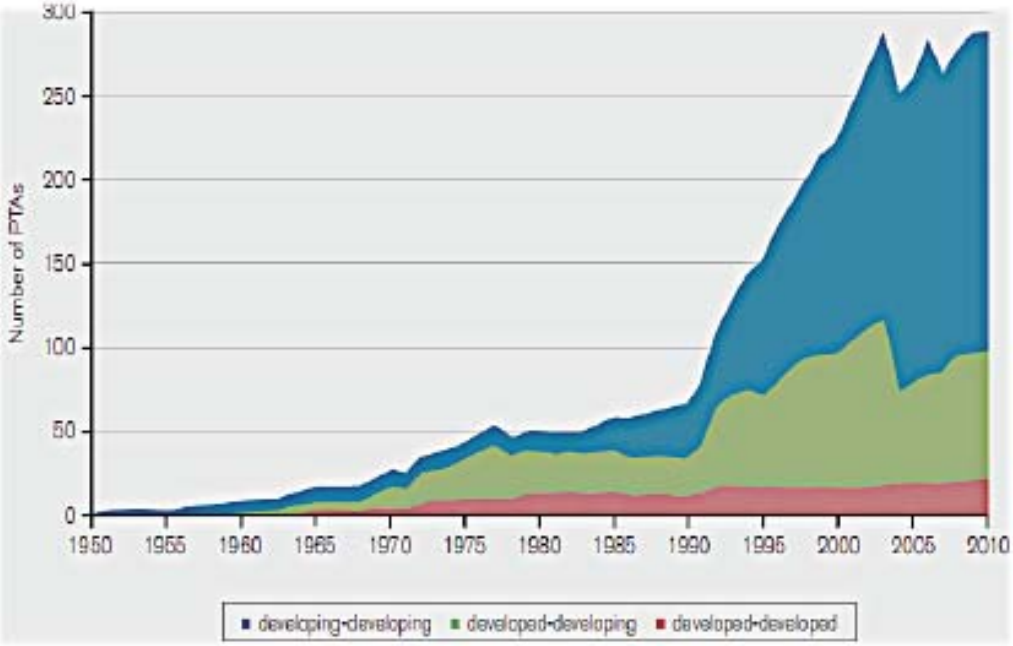
Figure 2.2 shows which countries still apply regular tariffs (ad valorem tariffs – AVEs). The EU and the US still apply high tariffs on certain products, for example bio fuels in the case of the EU and the US and electric cars in the EU.

Figure 2.2 Applied tariffs on end products in selected countries (AVE)



Source: WTO World Trade Report, 2011.

Figure 2.3 Cumulative amount of effectuated FTAs, 1950-2010



Source: WTO World Trade Report, 2011.

Figure 2.3 shows an equally interesting trend that shapes the environment of current international trade, i.e. the rise in RTAs since the establishment of the WTO in the mid-1990s. While the EU has effectuated several FTAs on behalf of its Member States and as such has contributed to the increase of RTAs, the largest share of new FTAs since the 1990s stem from the link with developing countries. However, this way of presenting a rise in FTAs foregoes two important issues:

1. The depth of each FTA;
2. The absolute impact of each FTA.

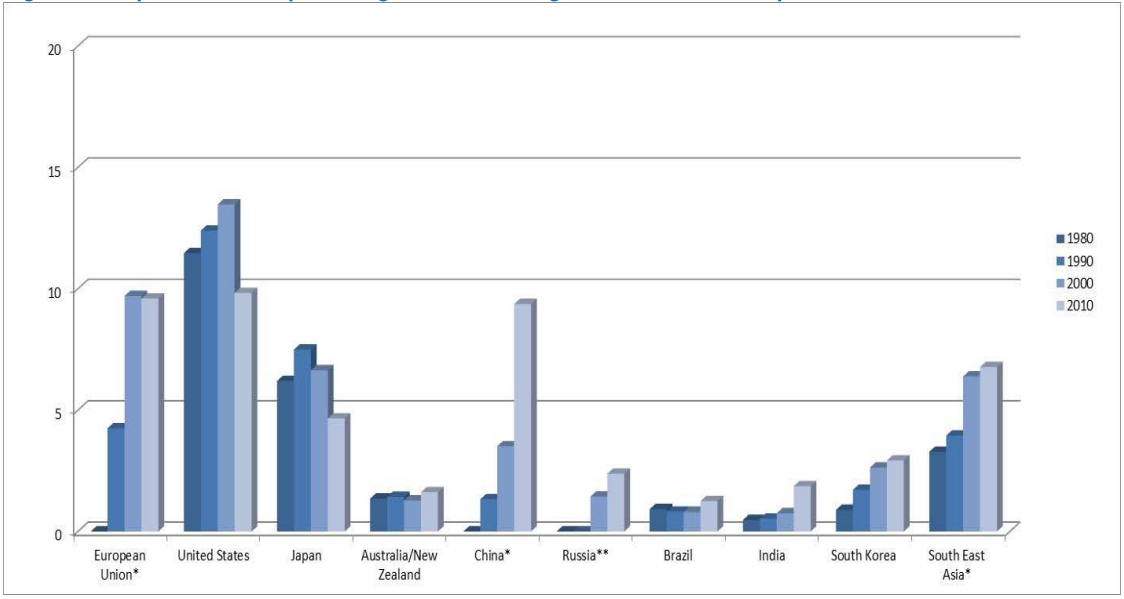
When these two criteria are considered, combined with the current trends, the importance of the FTAs that the EU will sign is clearly recognizable. Especially the relation with the US and the potential for an EU-US FTA would be the most important regional development in the trade field, considering the fact that such an FTA would potentially have an enormous absolute impact and would be one of the deepest in recent decennia. And while the countries around the Pacific Ocean are currently negotiating a similar agreement, this agreement would never match the depth of a Trans Atlantic Partnership (TAP).

2.2 Shifting global economic balance of power

Next to the trends of the rise of regional trade agreements and the decline in the relative importance of tariffs in comparison to non tariff barriers, the world has experienced another important trend: the shift of economic power from the West to the East in general, and to China specifically. Figure 2.4 to Figure 2.7 demonstrate this trend for the relative import and export shares of goods and foreign investments. The margin that the EU and the US currently have in the international economic environment is declining rapidly, especially in goods trade.

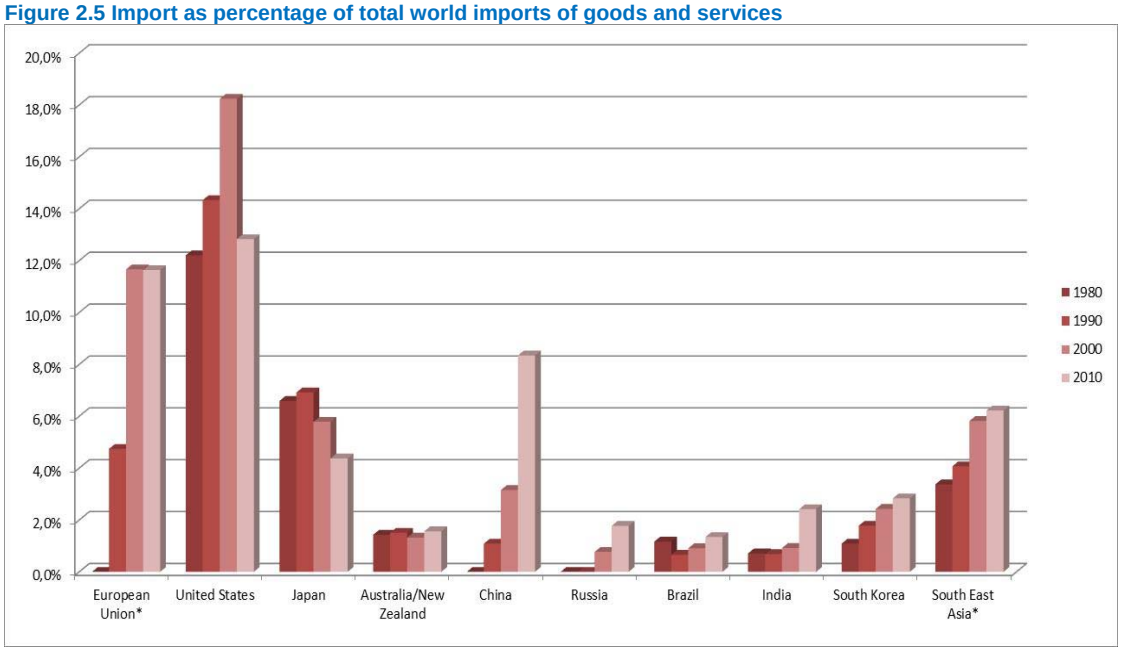
The figures illustrate that Asia's share in global exports and imports has increased rapidly in the past 20 years, while at the same time the share of European and American trade and investments has been declining. The dominance of the Western countries in the investment field is still much more profound compared to the goods trade, but also in this field both economies are losing ground (especially the EU). Recently, China has been increasing its investments overseas in order to grow its domestic business.

Figure 2.4 Export shares as percentage of total world goods and services exports



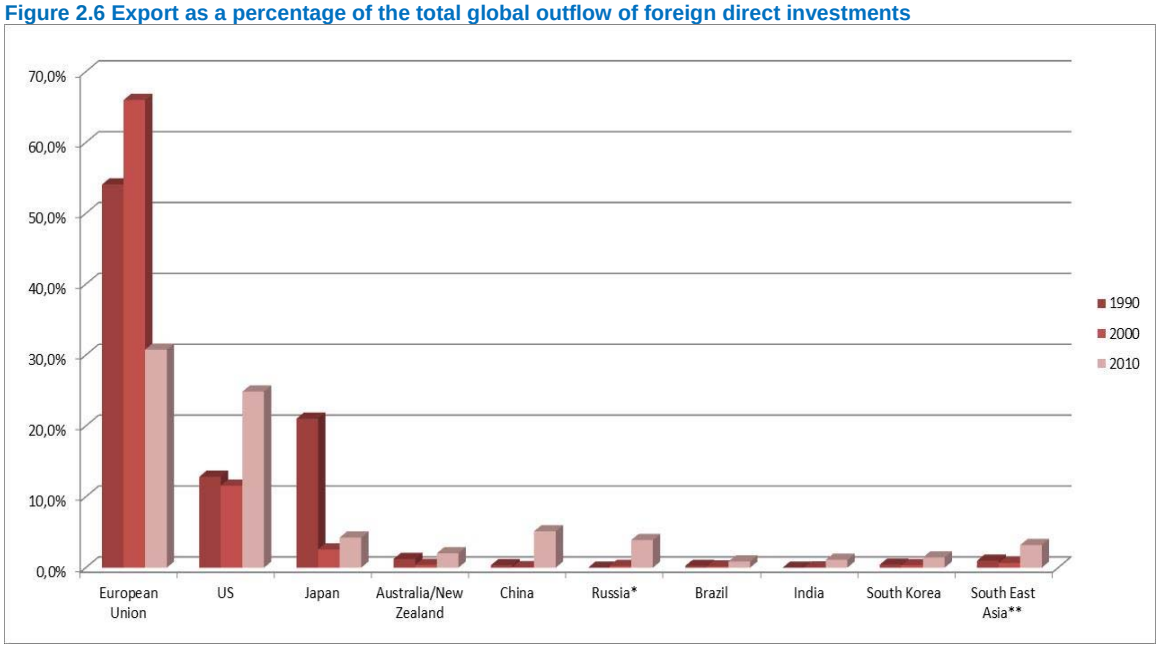
Source: World Bank Economic Indicators Database.

Figure 2.5 Import as percentage of total world imports of goods and services



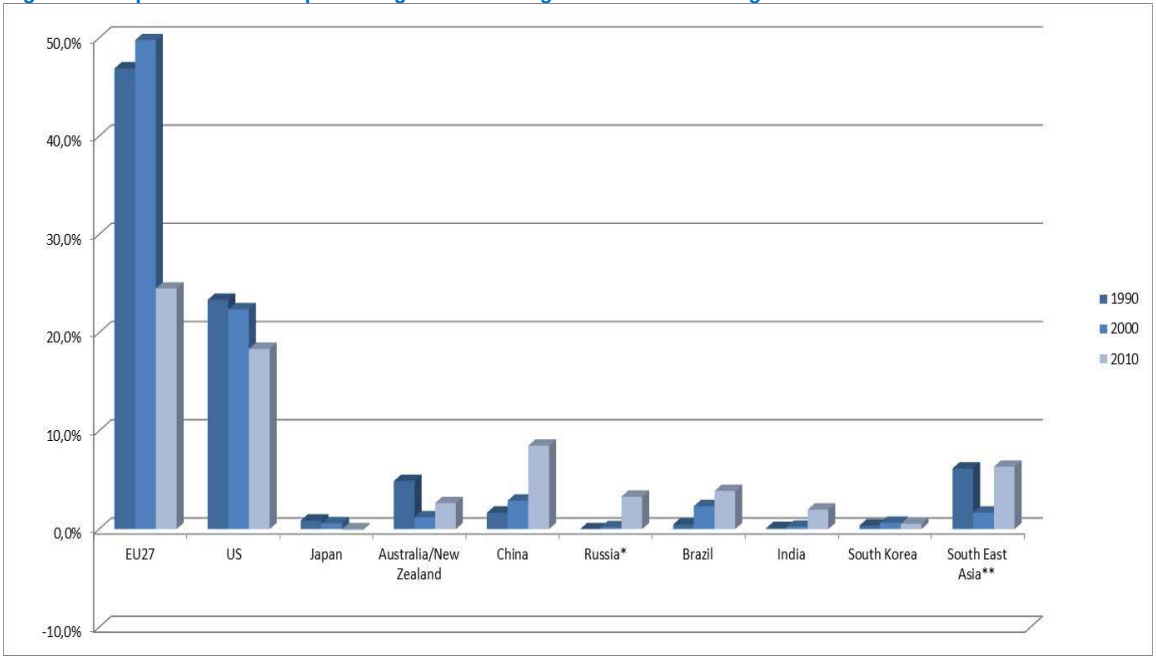
Source: World Bank Economic Indicators Database.

Figure 2.6 Export as a percentage of the total global outflow of foreign direct investments



Source: World Bank Economic Indicators Database.

Figure 2.7 Import shares as a percentage of the total global inflow of foreign direct investments



Source: World Bank Economic Indicators Database.

Of course, we should note that trade of goods is not equal to value added. China currently assembles a large share of (often imported) intermediate goods into final goods, which are then exported, whereas the actual design, development and intermediate parts still largely take place or are sourced from countries with a larger knowledge base and a comparative advantage in high-tech / high skilled labour. This implies that only a fraction of the total value of all these exports can actually be counted as added value created. This topic has also been subject to discussion during the BRIC-day organised by the Ministry of EA&I) on November 16th 2011 on the role of emerging markets for the Netherlands.[6]

The recent global shift of economic power has been well documented in the academic literature as well. For instance, Hamilton and Quinlan (2011) remark that "*As globalization proceeds and emerging markets rise, however, transatlantic markets are shifting from a position of pre-eminence to one of predominance – still considerable, but less overwhelming than in the past.*"[7] In this way, the authors claim that the share of the transatlantic market in the global stock capitalisation has decreased from 78 percent to just over 50 percent in the last ten years. The share of EU-US in worldwide trade in stocks has also decreased from 86 percent to 70 percent, while the share of Asia in total revenues in investment banking has increased from 13 percent to 20 percent. Finally, the total size of the stock markets in de BRIC countries (Brazil, Russia, India and China) has increased 40 percent per annum, while the stock markets in the EU and the US have shrunk.[8] The global economic crisis has further reinforced this shift of economic power.

6 BRIC-dag 'De reactie van Nederland op de opkomende markten' – BRIC-dag, Ministerie van Economische Zaken, 16 November 2011.

7 Hamilton, D. & Quinlan, J. (2011) "The Transatlantic Economy 2011: Annual survey of Jobs, Trade and Investment between the United States and Europe", Washington, DC: Centre for Transatlantic Relations, pp.V.

8 Hamilton, D. & Quinlan, J. (2011) "The Transatlantic Economy 2011: Annual survey of Jobs, Trade and Investment between the United States and Europe", Washington, DC: Centre for Transatlantic Relations.

2.3 The economic relation between the EU and the US

On the 16th of February 2012, Robert Hormats had to testify in front of the Banking Commission of the Senate about the Euro zone crisis: *"When then-candidate Barack Obama spoke in Berlin in July 2008, he stated that one of the priorities of his presidency would be to re-establish strong trans-Atlantic relations. Citing the daunting political, security and economic challenges of the 21st century, he stressed then that America has no better partner than Europe. In the more than three years since, and despite discussion in the media about where Europe fits in the United States' global framework and speculation that Europe is turning inward as it deals with its domestic issues, the reality that President Obama articulated in Berlin has not changed. Europe is - and remains - America's partner of first resort and its staunchest ally. The strategic alignment between the United States and Europe, rooted in shared history and values, has never been closer in addressing both international threats and internal challenges"* (Hormats, 2012).[9]

Apart from the emphasis that Hormats places on the strong partnership between the EU and the US, the fact that the Under Secretary of State for Economic, Business and Agricultural Affairs has to testify in front of the Senate illustrates the huge importance of the transatlantic relationship (Hamilton en Quinlan, 2011)[10]. Table 2.1 below provides an example that underlines the interdependence of the EU and US economies.

Table 2.1 Banks in various countries: international risks ($)

Exposure to (end June 2010)	French Banks	German Banks	Greek Banks	Irish Banks	Italian Banks	Portuguese Banks	Spanish Banks	UK Banks	Belgian Banks	U.S Banks
France		196.8bn	1.9bn	18.1bn	31.6bn	8.2bn	26.3bn	257.1bn	29.7bn	161.5bn
Germany	255.0bn		5.7bn	32.1bn	254.4bn	3.9bn	39.1bn	172.2bn	20.9bn	152.1bn
Greece	53.5bn	36.8bn		7.8bn	5.3bn	10.0bn	925.0m	12.0bn	2.0bn	7.5bn
Ireland	50.1bn	138.6bn	461.0m		15.3bn	19.4bn	14.0bn	148.5bn	54.0bn	68.7bn
Italy	418.9bn	153.7bn	485.0m	40.9bn		3.4bn	32.6bn	66.8bn	24.6	32.5bn
Portugal	41.9bn	37.2bn	101.0m	5.1bn	4.7bn		78.3bn	22.4bn	2.6bn	3.2bn
Spain	162.4bn	181.6bn	673.0m	25.3bn	25.6bn	23.1bn		110.8bn	18.8bn	47.1bn
UK	327.7bn	462.1bn	19.7bn	209bn	44.9bn	7.7bn	386.4bn		43.1bn	572.7bn
Belgium	253.1bn	35.1bn	5.7bn	90.5bn	3.7bn	400.0m	5.7bn	172.2bn		40.0bn

Source: Bank of International Settlements, Financial Times. Data for Foreign claims by nationality of reporting banks, immediate borrower basis.

The relation between the EU and the US is – according to Marc Vanheukelen[11] – good: *"Despite the economic and financial crisis and the rise of major emerging economies, the EU-US commercial relationship is still by far the biggest commercial artery in the global economy, worth around €3 trillion in terms of annual trade flows and investment. 15 million jobs are related to the transatlantic economy. The most distinctive feature of the EU-US link is the colossal mutual foreign direct investment with over €2 trillion mutual investment stocks, which sets it apart from any other link in the world. US firms are investing more in Belgium than in either Brazil, China or India, and EU investments in the US represent more than 2/3 of the overall investment inflows. Given the strong*

9 Hormats, R. (2012) "Testimony of under secretary Robert D. Hormats to the Senate Banking Committee February 16, 2012 on the examining the European Debt Crisis and its implications.

10 Hamilton, D. & Quinlan, J. (2011) "The Transatlantic Economy 2011: Annual survey of Jobs, Trade and Investment between the United States and Europe", Washington, DC: Centre for Transatlantic Relations.

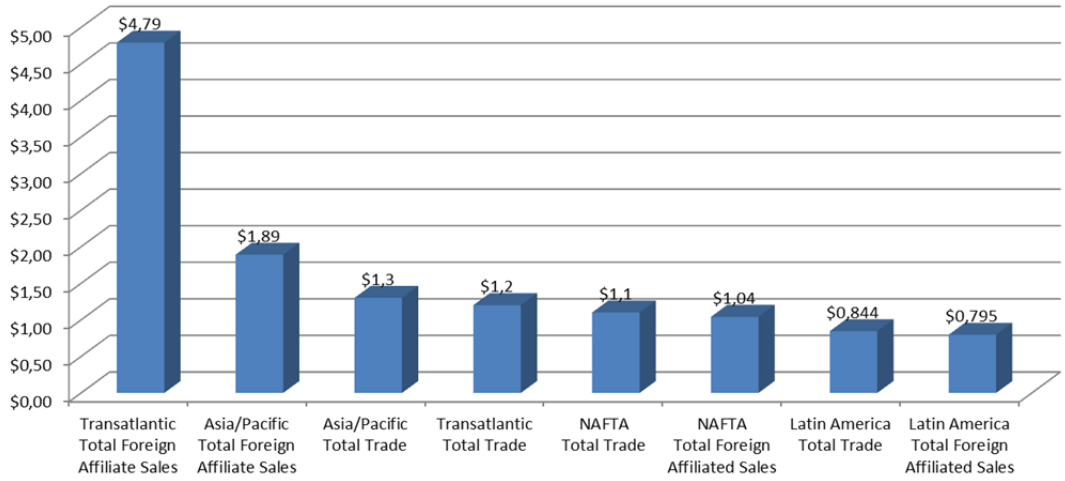
11 Marc Vanheukelen is Chef du Cabinet of Commissioner of DG Trade, De Gucht. The commissioner of Trade is the co-president of the TEC, the Transatlantic Economic Council, and also co-chair of the High Level Working Group on Growth and Jobs.

integration of our economies it is not surprising that we sometimes also get involved in trade disputes, which make it to the headlines such as Boeing/Airbus or REACH. But the disputes need to be put into perspective: they affect less than two percent of our trade."[12]

The deep and strong ties that characterise the relations between the EU and the US can be corroborated by several (economic) statistical indicators. The EU and the US have strong economic relationships on several levels. Despite the recession, both countries still constitute each other's main commercial markets. The total value of the transatlantic economy in terms of commercial sales is estimated at $5 trillion and together these markets create about 15 million jobs in both the US and the EU (Hamilton & Quinlan, 2011)[13]. Especially in foreign investment, portfolio investment, bank claims, trade and trade in goods and services of affiliates, and sales of knowledge-intensive services, the ties are strong. Figure 2.8 shows the main international economic relations of the US international trade in goods and services are slightly higher between the US and Asia / Pacific ($1.3 trillion) than between the US and the EU ($1.2 trillion). However, if we look at total sales of affiliates in the Transatlantic market (in other words, the depth of commercial presence in each other's economies), it appears that the Transatlantic artery is three times as big compared to the Trans-Pacific artery with Asia / Pacific. Commercial presence is what Hamilton en Quinlan (2010)[14] call the sleeping giant of the Trans Atlantic market.

Figure 2.9 confirms this view. It shows that the income of European affiliates of US owned companies exceeds $200 billion in 2010; vice versa income for European affiliates in the US amounted to $100 billion. This enormous interdependence and mutual dependence of two large economic powers is unique in our contemporary world.

Figure 2.8 The United States' most important commercial ties (trillion $US)



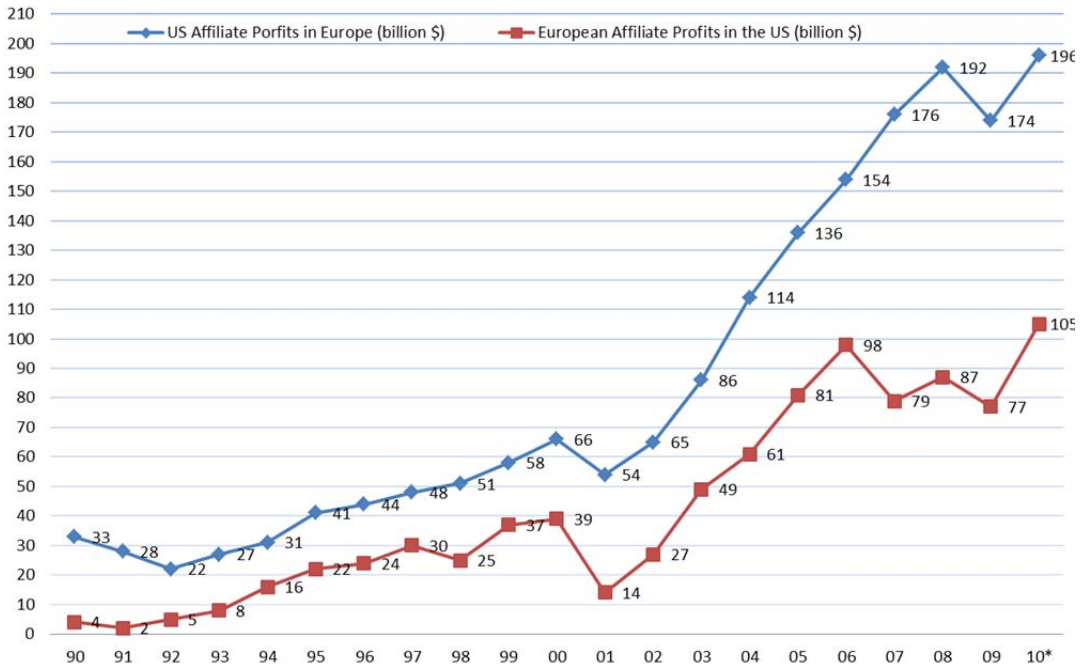
Source: Bureau of Economic Analysis. Foreign Affiliate Sales: Data for 2008; Total trade: Data goods and services, 2008.

12 Vanheukelen, M. (2012) "Transatlantic voices – Transatlantic economic relations" *in:* "Transatlantic Business Dialogue Newsletter February 2012", available at: http://www.tabd.com/images/stories/Documents/newsletter/TABD_NEWSLETTER_February_2012.pdf, pp.1.

13 Hamilton, D. & Quinlan, J. (2011) "The Transatlantic Economy 2011: Annual survey of Jobs, Trade and Investment between the United States and Europe", Washington, DC: Centre for Transatlantic Relations.

14 Hamilton, D. & Quinlan, J. (2010) "The Transatlantic Economy 2010: Annual survey of Jobs, Trade and Investment between the United States and Europe", Washington, DC: Centre for Transatlantic Relations.

Figure 2.9 Profits of EU/US affiliates in US/EU



Source: Bureau of Economic Analysis; * Data tot en met Q32010. Vervolgens geannualiseerd voor jaarschatting.

Another way of looking at the depth of the commercial relationship between the EU and the US is by studying the share of trade between related parties in countries, i.e. between different units of a multinational enterprise. The larger this share is, the larger the commercial presence of EU multinationals is in the US and vice versa. Table 2.2 illustrates the share of related party trade as a percentage of total trade and indicates that, for example, almost 65 percent of total exports from the Netherlands to the US is between different entities of multinationals (imagine ING exports services to one of its sister companies in the US). The share of total exports that is between related parties from the US to selected European countries is lower, which is an indication that there are relatively more US owned subsidiaries in Europe than the other way around.

Table 2.2 Intra-multinational trade as percentage of total trade

	US Imports: "Related Party Trade" as % of total	US Exports: "Related Party Trade" as % of total
European Union	60.7	30.6
Germany	64.5	29.6
France	55.9	27.7
Ireland	84.7	30.4
Netherlands	64.4	54.1
United Kingdom	59.4	23.6

Source: Bureau of Economic Analysis. Foreign Affiliate Sales: Data for 2008; Total trade: Data goods and services, 2008.

The transatlantic economy is the largest and richest market in the world and responsible for 54 percent of the value of world gross domestic product (2010) and 40 percent when adjusted for purchasing power (Hamiltion & Quinlan, 2011). Even after the financial crisis, the EU and US financial markets own more than two thirds of global bank assets, three-quarters of all global financial services and 77 percent of all equity linked derivatives. In addition, the market also owned 93 percent of all global foreign currency in US Dollars (62 percent), Euros (27 percent) and Pounds (4.2 percent) in 2010.

Finally, looking at the number of jobs generated in the US by subsidiaries of EU parent companies and vice versa, we observe that this appears to be an impressive 15 million. In comparison, the number of jobs generated by US firms in China is approximately 500,000. A company like Airbus alone is responsible for 180,000 jobs in the US and buys more than $10 billion in goods and services from the USA annually[15].

Table 2.3 The US-Europe employment balance ('000 employees, 2008)

Country	European Affiliates[1] of U.S. companies	U.S. Affiliates[2] of European companies	Employment balance
Austria	44.0	14.4	-29.6
Belgium	129.0	179.3	+50.3
Denmark	38.9	26.8	-12.1
Finland	23.8	31.5	+7.7
France	604.4	550.2	-54.2
Germany	621.3	614.2	-7.1
Ireland	89.0	66.2	-22.8
Italy	232.9	86.5	-146.4
Luxembourg	13.6	35.5	+21.9
Netherlands	228.8	371.5	+142.7
Norway	33.7	8.0	-25.7
Spain	188.1	66.8	-121.3
Switzerland	81.5	394.4	+312.9
United Kingdom	1,174.2	957.4	-216.8
Europe	3,503.2	3,402.7	-100.5

Source: Bureau of Economic Analysis; Note: A positive employment balance ("+") is defined as a net advantage for the US; [1] Majority stake in non-bank affiliates; [2] Majority stake in banks en non-bank affiliates.

In conclusion, the Transatlantic market is characterised by strong ties between the EU and US, of which the services and commercial presence in each other's economies and the concomitant job creation form the deepest links. The transatlantic economy is by far the largest in the world in terms of gross domestic product. We can draw two important policy lessons from these findings. Firstly, the EU and US are highly interdependent, but in an equal manner (compare this with the US-China relationship: Chinese exporters are highly dependent on the purchasing power of American consumers, but the ties are not nearly as deep). Secondly, even if further integration or alignment of NTMs would lead to a small percentage increase in economic growth or job growth, this would still - given the absolute size of the transatlantic economy - mean a lot in absolute terms. In other words, NTM harmonization could lead to a multi-billion dollar increase of gross domestic product and employment.

2.3.1 *Studies on the economic ties between the EU and the US*

In recent years, many different studies have been conducted on the effects of a potential intensification of the collaboration between the EU and the US. All expect positive impacts, but the estimated size of the effects differs. The lobby organisation ECIPE has calculated that an EU-US zero-tariff FTA (for certain goods) would increase GDP for the EU with 0.48 percent on an annual basis and GDP of the US with 1.48 percent, which would lead to an increase in welfare of $89 billion for the EU and a welfare gain of $87 billion for the US. Exports from the EU to the US would

[15] McArtor, A. (2011) "Sustaining competitiveness by continuing to set the standards" *in*: "Transatlantic Business Dialogue Newsletter October 2011", available at: http://www.tabd.com/images/stories/tabd_newsletter_october_2011.pdf.

rise by 18 percent and exports from the US to the EU would increase by 17 percent[16]. However, the NTM study from Ecorys (2010) [17] concludes that abolishing tariffs on goods and services trade between the transatlantic partners leads to a smaller combined welfare gain (see below). The Ecorys (2009) study on the FTA between the EU-US estimates that a 75 percent reduction in tariff cost equivalent trade barriers could lead to an increase in welfare of €13.9 billion for the EU and €5.6 for the US[18].

Existing studies do indeed show that 'regular' tariffs can already be considered low and that the most important obstacles for a truly integrated transatlantic market depends on the successful reduction of non-tariff measures[19]. This implies that issues such as sanitary and phyto sanitary (SPS) measures, technical barriers to trade (TBT), safety guidelines, REACH, the Buy American Act and related measures constitute a much larger barrier than remaining tariffs. The OECD (2007)[20] estimates that reforms tackling tariffs as well as non tariff barriers would increase GDP per capita by 3.5 percent. To put this in perspective, such a GDP increase would be equivalent to handing over an extra yearly salary to every citizen in the EU and the US over his or her entire working life.

The Ecorys NTM study (2010) is more conservative than the study from the OECD and concludes that reducing 50 percent of existing NTMs between the EU and the US would increase the GDP of the EU by 0.7 percent (€122 billion annually) and that of the US by 0.4 percent (€54 billion annually)[21].

2.3.2 The current state of affairs between the EU and the US

The previous sections have outlined in detail the (great) importance of the relation between the EU the US in economic terms. However, for a complete picture of the context that the current HLWG has been set up in, we need to look at the progress in the field of NTM alignment, institutions that have been set up to bring the EU and the US closer together and stories of success and failure that both parties have experienced in the past when trying to integrate markets.

As outlined in section 2.3, leaders on both the EU (de Gucht and Vanheukelen) and US (Hormats) side are positive about the bonds between the EU and the US. Next, a few institutions and opinions are reviewed that characterise the current environment.

The Transatlantic Economic Council

The Transatlantic Economic Council (TEC) is an institutionalised political collaboration agreement, which aims to speed up the cooperation between the governments of the EU and the US in order to realise economic integration between the two country blocs. In 2007 the EU and the US agreed, during a bilateral summit, on a framework (working plan) for a deepening of the Trans Atlantic economies. The TEC executes this (continuously changing) working plan. Since 2009, the EU Commissioner for Trade, Karel de Gucht, chairs the meetings. The chairman on the US side is the interim national security advisor for international-economic relations, Michael Froman.

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16 Erixon, F. and Bauer, M "A Transatlantic Zero Agreement: Estimating the Gains from Transatlantic Free Trade in Goods," ECIPE occasional Paper No. 4/2010 (Brussels: ECIPE, 2010).

17 Berden, K. et. al, Non- Tariff Measures in EU- US Trade and Investment: An Economic Analysis (Rotterdam: Ecorys, 2009).

18 Berden, K. et. al, The Impact of Free Trade Agreements in the OECD: The Impact of an EU- US FTA, EU-Japan FTA and EU- Australia/New Zealand FTA (Rotterdam, Ecorys, 2010).

19 Berden, K. et. al, Non- Tariff Measures in EU- US Trade and Investment: An Economic Analysis (Rotterdam: Ecorys, 2010).

20 OECD (2007), *International Investment Perspectives 2007: Freedom of Investment in a Changing World*, OECD Publishing.

21 See footnote 13.

Related to the TEC are the High Level Regulatory Cooperation Forum (with the specific mission of addressing discrepancies in the regulatory environments and reporting these to the TEC) and the Energy Platform (to target energy-specific aspects).

The recent achievements of the TEC are an indication of the state of affairs in the current EU-US environment. Aligning NTMs between both partners is not easy, but still the TEC has succeeded in reducing some important barriers, not least the barriers on secure trade and electrical cars. In both areas, the TEC has achieved convergence between the two trading partners in their way of viewing and assessing trade in products and services. Next to its general efforts in reducing regulatory differences, the TEC also works on safety on the road, testing of cosmetics and the prevention of new NTMs arising.

Despite these successes of the TEC, critics argue that the body lacks concrete achievements and results since it often get stuck on working on the details of certain issues.

The High Level Working Group on Growth and Jobs

During the high level summit of European and US leaders in November 2011, EC President Barroso and US President Obama asked the TEC to create the HLWG on Growth and Jobs. The HLWG is specifically tasked with analysing which NTMs (once they are aligned) could create the most growth and employment in the short term for the EU and the US. The HLWG is co-chaired by EU Commissioner of Trade, Karel de Gucht, and US Trade Representative Ron Kirk and is supposed to publish results twice in 2012: an interim report in June and a final report in November.

Successful completion of the work of the HLWG is very welcome on both sides of the Atlantic: Higher economic growth would increase tax collections and reduce national debts in Europe and in the US could lead to much needed employment growth. The deadlines for the HLWG are hence tight and both the EU and the US are pressing for results in the short term.

Opinions on the EU-US relation – the TABD Newsletter

The opinions of several key figures in the EU-US economical and political field will also give a good impression of how the current relationship can be described and is experienced. These key figures have a solid understanding of the potential impact and the way forward of the intensified relationships. A variety of opinions – as recorded in the Trans Atlantic Business Dialogue (TADB) Newsletter - is considered here, from: Philippe Meyer (Head of Unit of EU-US relations for DG Trade), James Elles (Member of European Parliament (MEP) and chairman of the Transatlantic Policy Network (TPN)), Koen Berden (Partner Ecorys) and Mark Vanheukelen (Chef du Cabinet of EU Commissioner de Gucht).

Philippe Meyer (Head of Unit of EU-US relations within DG Trade)

Philippe Meyer wrote the keynote of the December 2010 edition of the TABD Newsletter. In this article, he claims that the new ‘administrations’ are ready for talks on far-reaching collaboration between the EU and the US through the TEC and through the High Level Regulatory Cooperation Council. He writes that the advantages of cooperation are clear and that most of the players are ready to implement changes. On the other hand, he acknowledges that even after more than 15 years of work on the transatlantic relations, there are still many challenges that need to be overcome in order to put steps forward. Particularly troublesome topics are e-health, electric cars, and secure trade.

James Elles (MEP, chairman TPN)

James Elles, wrote the keynote for the October 2011 edition of the TABD Newsletter. He clearly states that the goal of increased cooperation should be strongly tailored towards a 'growth and jobs' approach, so as to also 'find solutions for domestic problems': "*A comprehensive push to remove non-tariff barriers and create a truly liberated transatlantic market could form the core of such a 'Transatlantic Growth and Job Initiative*' (TABD, October 2011)[22]. Such a solution would also be the best response to the shift of economic power to Asia.

Koen Berden (Partner Ecorys)

Dr. Koen Berden wrote the keynote for the January 2012 edition of the TABD Newsletter. As the first to write after the EU-US Top and TEC, he emphasises the urgency to come to an agreement of a Transatlantic NTM FTA – TANFTA. Completely in line with the focus applied by James Elles, he believes that the TANFTA should create jobs and economic growth. He brings forward five key points that the TANFTA should include: 1) the creation of a tariff-free transatlantic market; 2) addressing existing NTMs with large potential economic benefits; 3) Cooperation to ensure that potential new NTMs are tackled before they emerge; 4) Strengthening the institutional transatlantic environment to implement and enforce TANFTA and 5) Engaging other (emerging) economies in TANFTA.

Marc Vanheukelen (Chef du Cabinet van Karel de Gucht)

Marc vanheukelen wrote the keynote for the February 2012 edition of the TABD Newsletter. According to Vanheukelen it is clear that: "*our [US and EU] economies are already so integrated that it is easy to become complacent. But the biggest challenge still remains to be tackled, i.e. how to exploit the full potential of the transatlantic relationship to remain competitive on a global scale. To achieve that, we need to strengthen regulatory coherence and develop common policy approaches, which we promote internationally to give businesses a level playing field in the transatlantic market and beyond. And we need to identify and assess options for strengthening the EU-US trade and investment relationship, especially in those areas with the highest potential to support jobs and growth."*

[22] Elles, J. (2011) "Transatlantic voices – EU-US cooperation: Time for a transatlantic growth and jobs initiative" *in*: "Transatlantic Business Dialogue Newsletter October 2011", available at: http://www.tabd.com/images/stories/tabd_newsletter_october_2011.pdf, pp.2.

3 Quantitative results of trade liberalisation for NL, EU26 and US

This chapter analyses the quantitative impacts of a trade liberalisation process under a bilateral FTA between the EU and the US. It summarises the findings of the Ecorys (2009) EU-US FTA study and calculates and spells out the specific outcomes for the Netherlands (in addition to summarizing the EU and US results) of the Ecorys NTM study (2010).

3.1 Effects of an EU-US FTA including tariff liberalisation

3.1.1 Specification of the study

The Ecorys (2009) study, conducted for the Ministry of Economic Affairs, employs a standard multi-regional computable general equilibrium (CGE) model, which is based on the original Francois, van Meijl and Van Tongeren model (FMT, 2005). This CGE model uses GTAP 7.0 data benchmarked to 2004, which provided the most recent available data on production, consumption and trade at the time. The model takes into account taxes at various levels, trade policy instruments, international trade costs and important industry competition features. The results of the CGE exercise are split into macro-economic effects and sector-specific effects and into short run and long run effects (taking into account capital accumulation and convergence to a steady (equilibrium) state). These effects are summarised in the next two subsections. It is important to keep in mind that the impacts in this study are assessed with the assumption (baseline scenario) that *no* Doha-agreement will be concluded in the WTO. Lastly, NTMs are modelled using Ad Valorem Equivalents (AVEs) of border protection across the world. Modelling of the specific effects of individual NTMs has not been conducted in this study. Hence, the extent to which NTMs are taken into account in this study can be considered limited and generic (same level of reduction across all sectors).

Based on GTAP 7, the sector specification was obtained from the original 57 GTAP sectors and aggregated into 33 economic sectors. Since the original study also studied the effects of a potential FTA between the EU and Japan and EU-Australia/New Zealand, the country specification includes The Netherlands, EU26, the US, Japan, Australia/New Zealand, China/Brazil/Russia/India and the Rest of the World.

The study has modelled an ambitious level of liberalisations in the areas of tariffs, barriers to services trade and NTMs. Specifically, trade in goods is liberalised completely (100 percent), barriers in services trade are reduced by 75 percent and NTBs are reduced by 2.5 percent compared to the baseline scenario.

3.1.2 Macro-economic effects

The long run macro-economic effects for the Netherlands, the US, and the EU26 are presented in Table 3.1 and analysed in terms of national income, relative changes in value of exports and imports and relative changes in real wages for skilled and unskilled workers. The long run effects take into account that capital is mobile, flows into sectors with comparative advantages and thus brings about distributional changes between economic sectors.

Table 3.1 Macroeconomic changes according to Ecorys (2009) EU – US FTA study

	NL	EU26	US	JAP	AUS/NZ	BRIC	ROW
Short run, changes							
National income, million €	**245.5**	**15,260.6**	**17,959.1**	-929.9	-84.3	-1,307.0	-3,426.9
Value of exports, %	**1.1**	**1.4**	**5.6**	-0.4	-0.1	-0.3	-0.2
Value of imports, %	**1.1**	**1.4**	**3.6**	-0.4	-0.1	-0.3	-0.2
Real wages, %, unskilled workers	**0.2**	**0.3**	**0.2**	-0.0	0.0	-0.0	-0.0
Real wages, %, skilled workers	**0.2**	**0.3**	**0.2**	-0.0	0.0	-0.0	-0.0
Long run, changes							
National income, million €	**1,375.2**	**34,927.4**	**24,061.7**	-1,889.0	-115.9	-4,402.6	-8,806.5
Value of exports, %	**1.3**	**1.6**	**5.7**	-0.4	-0.1	-0.3	-0.2
Value of imports, %	**1.4**	**1.6**	**3.7**	-0.4	-0.1	-0.3	-0.3
Real wages, %, unskilled workers	**0.5**	**0.5**	**0.3**	-0.1	-0.0	-0.1	-0.1
Real wages, %, skilled workers	**0.5**	**0.5**	**0.3**	-0.1	0.0	-0.1	-0.1

The results show that a potential EU-US FTA – modelled as specified above – would yield positive results in terms of welfare in all three country-blocs (EU, US and NL). The yearly change in national income in the Netherlands is estimated to be €1.38 billion, compared to almost €35 billion for the rest of the EU and €24 billion for the US in the long run.

As a result of the modelled FTA, both import and export in value terms of the EU, US and Netherlands will increase. Relatively, US exporters and importers are expected to experience the biggest impact, with value of exports and imports increasing by 5.7 and 3.7 percent, respectively, in the long run. For the US, the value of exports is expected to grow relatively more than the value of imports; for the Netherlands this pattern of change is similar. The increased trade flows between the EU and US will have a slight trade diversion effect with respect to the rest of the world, manifested by small decreases of all indicators for Japan and the BRICs.

As a result of the increased economic activity due to higher trade flows, wage effects are also expected to be positive for all three, with similar (small) percentage increases. Dutch, EU and US wage effects are slightly positive both for unskilled and for skilled workers.

When decomposing the national income effects into the various components modelled, it becomes clear that 60 percent of total estimated trade liberalisation gains for the Netherlands stem from the reductions of NTMs modelled. For the EU26 and US these percentages are 50 and 52 percent, respectively. This implies that NTM reduction is relatively more important for the Netherlands than for the EU as a whole, where tariff reductions have relatively more impact.

3.1.3 Sector specific effects

The study further disaggregates the effects of an EU-US FTA for the 33 sectors specified in the model in terms of changes in output, exports, producer prices and employment. Table 3.2 lists the effects in terms of output and exports, which gives a representative overview of which sectors gain and which sectors lose. Since the figures represent long run changes, thus taking into account the shift of resources across sectors, production factors will shift to sectors with comparative

advantages and move out of less competitive sectors, which in turn results in differences between sectors.

Table 3.2 Sector-specific effects, Long run, percentage changes

Sector	Output, % change			Exports, % change		
	NL	EU26	US	NL	EU26	US
Chemicals, rubber, and plastics	0.2	0.2	0.1	1.6	1.5	7.6
Other machinery and equipment	0.1	0.7	-1.1	1.7	2.4	4.6
Petro-chemicals	1.7	0.5	-0.2	3.1	2.7	3.1
Electrical machinery and equipment	-0.1	-1.3	6.3	-0.1	-0.8	11.1
Processed foods, n.e.c.	-0.1	0.2	0.2	1.2	1.4	9.4
Iron and steel	5.6	0.2	-0.8	6.1	0.5	-0.2
Motor vehicles	-2.9	1.2	1.2	-3.3	2.5	8.6
Crops, n.e.c. (except grains)	-1.3	-1.5	3.4	2.6	7.3	53.9
Vegetables and fruits	1.1	-0.1	-0.3	0.9	-0.1	0.5
Fabricated metals	0.7	0.4	-0.2	1.9	2.1	5.7
Beverages and tobacco	2.1	0.2	0.0	2.7	1.0	7.0
Non-ferrous metals	0.2	-0.1	0.6	0.3	0.9	7.5
Vegetables oils	0.7	0.3	-0.6	0.9	1.6	2.2
Paper, pulp, and publishing	0.4	0.2	-0.1	0.9	0.5	1.0
Textiles	1.1	1.1	0.1	3.1	3.0	6.2
Dairy products	2.5	1.6	-3.6	6.5	11.5	45.3
Manufactures, n.e.c.	-0.6	0.6	0.1	0.2	4.5	9.3
Meats, except beef	-2.4	-3.8	4.0	-2.5	-2.8	35.5
Other transport equipment	-3.6	-3.1	3.3	-2.7	-1.3	12.5
Clothing	0.2	0.1	16.7	0.9	1.3	31.4
Oil, gas, and coal	0.0	0.0	0.0	-0.2	3.7	5.3
Wood products	0.4	0.4	-0.3	1.1	1.2	2.4
Other goods	0.3	0.2	-0.6	0.9	1.3	1.3
Utilities	0.4	0.2	0.2	0.6	-0.1	-0.8
Construction	0.5	0.4	0.3	0.4	0.0	1.0
Retail and wholesale trade and warehousing	0.2	0.3	0.2	0.3	0.1	1.5
Transport services	0.7	0.3	0.1	0.9	0.7	1.3
Communications	0.3	0.1	0.2	0.6	0.4	7.3
Other financial services	0.4	0.5	-0.1	2.5	5.9	10.1
Insurance	0.3	1.7	-1.4	1.7	7.6	2.7
Other business services	0.4	0.1	0.2	0.9	0.7	7.4
Recreational and consumer services	0.4	0.1	0.2	0.6	0.1	1.7
Other services (public health, education, residential)	0.1	0.1	0.1	0.2	-0.4	-0.9

For the Netherlands, the largest positive output effects (in percentage changes) of the FTA are found in the *iron and steel* (+5.6 percent)*, dairy products* (+2.5 percent) and *beverages and tobacco* (+2.1 percent) sectors, whereas the most negatively affected sectors are the *other transport equipment* (-3.6 percent), *motor vehicles* (-2.9 percent) and *meats* (-2.4 percent) sectors. When interpreting the percentage changes against the initial importance of each sector in the Dutch economy (baseline value), the study finds that *other business services* (+0.4 percent) and the *construction* sector (+0.5 percent) are expected to show the largest absolute changes. In terms of exports, the *iron and steel* and *dairy products* are also the strongest growers in percentage terms, together with *petro-chemicals* (+3.1 percent) and *textiles* (+3.1 percent).

In the EU26 the most significant output changes accrue to the *insurance* (1.7 percent) and the *dairy products* (+1.6 percent) sectors, whereas the *meats* (-3.9 percent) and *other transport equipment* (-3.5 percent) sectors will see production factors move away and output decline most strongly.

The profound relative changes in trade flows on the macro-economic level in the US are also reflected at a sectoral level in terms of export values. Sectors that stand to gain strongly from an FTA in terms of export growth are mostly the primary sectors *crops* (+53.9 percent), *dairy products* (+45.3) and *meats* (+35.5 percent). In terms of output, the *dairy products* sector is actually the worst affected at least in percentage terms (-3.6 percent), whereas *meats* and *crops* are amongst the sectors with the highest positive changes in output. The largest output expansion due to the FTA is seen in the *clothing* (+16.7 percent) sector and the *electrical machinery and equipment* (6.3 percent) sector.

3.2 Effects of reducing Non Tariff Measures between the EU and the US

3.2.1 Specification of the study

Non-Tariff Measures (NTMs) are identified as the largest source of potential trade liberalisation gains by several studies, including in the EU-US FTA study discussed in the previous section[23]. The Ecorys NTM study, conducted for DG Trade, goes beyond the previous study by specifically looking into the effects that NTM liberalisations between the EU and US can have on trade and investment flows. Provided that DG Trade will use the outcomes of this NTM study in the negotiation processes and in the High Level Working Group, the exact specifications of this NTM study are used in specifying further the impacts for the Netherlands and the EU26.

The study bases its estimates of the NTMs and regulatory divergences on several sources of information, of which a large business survey (5,500 responses) constitutes an important part. Responses in the survey are given in the form of a bilateral (both from the EU to the US and vice versa) NTM index: with 0 representing no existing barriers in the sector and 100 representing the presence of totally prohibitive barriers. Gravity analyses, sector expert views and literature complete the information basis for the final estimation of the NTMs in a sector. This information is then used as one of the factors to explain trade at sector level. For example, in pharmaceuticals, NTMs constitute a 15.3 percent Trade Cost Equivalent (TCE) trade barrier from the US to the EU. Alignment of NTMs then implies that these trade cost equivalents are reduced. The CGE model, in turn, links these trade liberalisation effects between all sectors in an economy and calculates the effects on several indicators such as welfare, trade and wages.

The study does not model tariff reductions or service barrier reductions (whereas the previous study did), but does model an ambitious level of NTM reductions only. The scenarios that are used in the model are thus considered to be less ambitious overall, but more realistic provided the strong emphasis on NTM reductions at a sector-specific level.

It is assumed that half of the total present NTMs in a sector are actionable, i.e. could be reduced. Of this 50 percent that is actionable, reductions are defined in an ambitious and a limited scenario:

1. Ambitious scenario. All actionable NTMs are aligned (= 50 percent of total NTMs) – modelled both for the short run and the long run;
2. Limited scenario. 50 percent of actionable NTMs are aligned (= 25 percent of total NTMs) – again both short run and long run effects are modelled.

[23] 60% of total trade liberalization gains (in terms of national income) for the Netherlands, 50% for the EU26 and 52% for the US.

Further specifications have been provided in 1.2.1. The results of specifying results for the Netherlands are presented below.

3.2.2 Macro-economic effects

The results at the macroeconomic level for the Netherlands, the EU26 and the United States are presented in Table 3.3. The table presents the long run (when capital is allowed to move across countries and sectors) and short run (when capital is fixed) changes in the case of full reduction of actionable NTMs (50 percent of total NTMs can be reduced) and partial reduction of actionable NTMs (25 percent).

The results show both significant short run and long run changes in national income for both the transatlantic country blocs, as well as the Netherlands. In the long run, the additional gains over the baseline scenario constitute some €4 billion for the Netherlands, €117 billion for the EU26 and €41 billion for the United States. In relative terms, this implies that the gains for the EU26 and for the Netherlands are slightly higher (+0.73 and +0.72 percent) than for the US (+0.28 percent).

The terms of trade for the Netherlands and for the EU26 will slightly improve, in contrast to those for the US. It is however not possible to identify whether this decrease for the US is attributable to a decrease in the price of exports and/or increase in price of imports. Both the Netherlands and the EU26 will see an increase in their total trade flows. The EU26 will see its exports and imports increase with approximately the same percentage, whereas for the Netherlands the percentage change in value of imports will be slightly higher than the percentage change in exports.

Table 3.3 Macroeconomic effects according to Ecorys (2010) NTMs study and NL split-out

Actionable set of NTMs reduced Macroeconomic effects	Full liberalisation of actionable NTMs, SR	Full liberalisation of actionable NTMs, LR	Partial liberalisation of actionable NTMs, SR	Partial liberalisation of actionable NTMs, LR
Real income change, million €				
United States	18,992	40,781	7,817	18,343
Netherlands	1,411	4,076	610	1,811
EU26	44,437	117,413	18,738	51,744
Real income change, %				
United States	0.13	0.28	0.05	0.13
Netherlands	0.25	0.72	0.11	0.32
EU26	0.25	0.73	0.16	0.32
Terms of trade, % change				
United States	-0.15	-0.23	-0.06	-0.10
Netherlands	0.12	0.07	0.05	0.03
EU26	0.11	0.07	0.05	0.03
Change in value added, %				
Netherlands	-0.02	0.41	-0.01	0.18
EU26	-0.02	0.42	-0.01	0.19
Change in value of exports, %				
Netherlands	1.41	1.69	0.63	0.76
EU26	1.64	2.03	0.72	0.88
Change in value of imports, %				
Netherlands	1.45	1.83	0.64	0.80
EU26	1.64	2.01	0.72	0.88

3.2.3 *Sector specific effects*

This section presents an interpretation of the most significant impacts at sector level (top-5 sectors most positive and most negative impacts) for the indicators output, value of exports and value of imports. The text reports long run changes for the full liberalisation scenario. The full results at sector-level are presented in Annex A. These tables present all sectoral changes in output, exports and imports and are an addition to the original Ecorys NTM study (2010).

Output

Table 3.4 shows the sectors that are expected to gain and lose most significantly in terms of relative changes in output in the Netherlands. After a full liberalisation of all actionable NTMs in all sectors, the *motor vehicles* sector (+5.7 percent), together with the *chemicals* sector (+2.2 percent) is expected to experience the largest increase in production output in the long term. In the Netherlands, the chemicals sector has a 2.2 percent share in total value added and the motor vehicles sector a 0.5 percent share. Hence, the increases in output accrue to relatively small sectors in the economy. The 0.8 percent increase in output in the *construction* sector (constituting 10.2 percent of the Dutch economy) in that sense gives rise to larger absolute gains, attracting capital and labour from less competitive sectors of the economy. The Dutch *electrical machinery* sector is expected to lose most in relative terms from trade barrier alignment between the EU and US (-5.5 percent). This finding is in line with the Ecorys NTM study (2010), which finds that the electrical machinery sector gains the most in the US in terms of output and loses the most in the EU. This shows that in the long term, comparative advantages will be properly exploited. For the Netherlands, this sector has a relatively small share in the Dutch economy (0.4 percent), hence the absolute losses will be relatively small.

Table 3.4 Percentage change in output, the Netherlands

Top-5 (positive)	Full liberalisation,	Top-5 (negative)	Full liberalisation,
NL	LR	*NL*	LR
Motor vehicles	5.7%	Electrical machinery	-5.5%
Chemicals	2.2%	Other machinery	-1.9%
Insurance	1.2%	Other transport equipment	-0.9%
Processed foods	0.9%	Metals and metal products	-0.5%
Construction	0.8%	Personal services	-0.1%

Exports and imports

Table 3.5 presents the relative changes (in percentages) in the value of exports for the Netherlands. For most of the sectors, we observe a strong link between growth (or decline) in output and growth (or decline) in exports. Only *other transport equipment* (+4.2 percent) was not in the top-5 of output changes. Together with the rise in output (+0.9 percent), the *processed foods* sector (+5.4 percent) will have an important impact on the Dutch economy due to its important initial share in total exports (12.2 percent). Also the *chemicals* sector will be increasingly competitive (+6.2 percent) and has an important impact on the international trading position of the Netherlands since it is the largest export sector (16.3 percent). The strong growth of the *motor vehicles* sector can be seen as a strong increase in intra-industry trade as the Netherlands does not have a very developed automotive industry (anymore). Thus, the increases in output and exports should relate to an increase in production and trade of intermediate parts that are used abroad for assembling cars. *Electrical machinery* again loses export share (-4.6 percent) and also *other machinery* (-2.6 percent) will be negatively affected. The loss in exports of the *other machinery* sector and the *agriculture, forestry and fisheries* (-0.9 percent) sectors will have the largest absolute impacts due to their relative importance in Dutch international trade (7.3 percent and 10.1 percent respectively).

Table 3.5 Percentage change in value of exports, the Netherlands

Top-5 (positive) *NL*	Full liberalisation, LR	Top-5 (negative) *NL*	Full liberalisation, LR
Motor vehicles	10.7%	Electrical machinery	-4.6%
Chemicals	6.2%	Other machinery	-2.6%
Insurance	5.9%	Agr, forestry, fisheries	-0.9%
Processed foods	5.4%	Personal services	-0.8%
Other transport equipment	4.2%	Other manufactures	-0.4%

Table 3.6 and Table 3.7 exhibit absolute changes in the value of exports and the value of imports, respectively, for both the Netherlands and the EU26. The export values correspond to the export changes in percentage terms reported for the Netherlands above, but give an additional sense of magnitude of effects.

In terms of export value, it is clear that *chemicals* and *processed foods* are sectors that are expected to become stronger both in the Netherlands and in the rest of the EU. The *motor vehicles* sector will gain most significantly in the EU26 (+ €70 billion) and the Netherlands is likely to gain proportionally from intra industry trade. The Dutch *chemicals* sector (+ €3.8 billion) is likely to gain relatively more from a reduction in trade barriers due to the larger share that the chemicals sector constitutes in the Dutch economy. The *other machinery* sector will see investments disappear in the long run all over the EU26 and experience a decline in exports of approximately €21bilion.

Table 3.6 Change in value of exports, million €, the Netherlands and EU26

Top-5 (positive) *NL*	Full liberalisation, LR	Top-5 (negative) *NL*	Full liberalisation, LR
Chemicals	3,855	Other machinery	-697
Processed foods	2,755	Agr, forestry, fisheries	-524
Motor vehicles	1,243	Electrical machinery	-268
Metals and metal products	382	Other manufactures	-267
Business services	243	Personal services	-30
Top-5 (positive) *EU26*	**Full liberalisation, LR**	**Top-5 (negative) *EU26***	**Full liberalisation, LR**
Motor vehicles	69,898	Other machinery	-20,560
Chemicals	51,583	Electrical machinery	-7,072
Processed foods	18,961	Other manufactures	-3,152
Other transport equipment	7,098	Agr, forestry, fisheries	-2,654
Metals and metal products	6,459	Personal services	-875

Table 3.7 Change in value of total imports, million €, the Netherlands and EU26

Top-5 (positive) *NL*	Full liberalisation, LR	Top-5 (negative) *NL*	Full liberalisation, LR
Chemicals	762	Water transport	19
Metals and metal products	754	Air transport	38
Business services	606	Insurance	39
Other machinery	548	Construction	45
Other services	529	Finance	62
Top-5 (positive) *EU26*	**Full liberalisation, LR**	**Top-5 (negative) *EU26***	**Full liberalisation, LR**
Other machinery	19,817	Water transport	531
Chemicals	17,828	Construction	913
Metals and metal products	15,535	Insurance	977
Electrical machinery	12,272	Air transport	1,188
Motor vehicles	10,056	Communications	1,493

With respect to the changes in the value of imports for the EU26 and the Netherlands from the world, it is remarkable that there is not a single sector that will see total imports falling as a result of the EU-US FTA. The right column of the table should therefore be interpreted as the sectors with the smallest absolute increases in imports.

Compared to the baseline scenario, a full liberalisation of actionable NTMs in all sectors will lead to a strong increase in total imports in the *chemicals* (+ €0.8 billion), *metals* (+ €0.8 billion) and *business services* (+ €0.6 billion) sectors in the Netherlands. The *other machinery* (+ €0.5 billion) sector results show that economic activity will move away from the EU (both the Netherlands and the EU26) since exports decline and imports increase strongly (in EU26 other machinery is the strongest growing import sector with + €20 billion), implying that the US has a relative comparative advantage there. The combined result that the *chemicals* sector starts both importing and exporting more in the EU26 and the Netherlands could be a sign that NTMs currently constitute a significant barrier to trade and removing them would increase bilateral trade flows significantly. A similar intuition can be applied to the *motor vehicles* (+ €10 billion in the EU26) sector, which is likely to see intra industry trade in motor vehicles parts increase strongly.

3.3 Summarising overview of macro-economic results from both studies

For comparison, the macro-economic results from both the NTM study (including the additional specification for the Netherlands presented above) and the EU-US FTA study are reported alongside in Table 3.8.

The results show that an ambitious alignment of NTMs yields more gains for all countries in the long run than an ambitious modelling of tariff and service level reductions For example, national income for the Netherlands is expected to increase by €4.1 billion due to an ambitious alignment of NTMs, versus €1.4 billion due to the generic FTA including tariff reductions. The value of exports and imports will increase in all cases both for the Netherlands and for the EU. Both the NTM study and the EU-US FTA study indicate that the US will increase its value of exports relatively more than its value of imports.

Table 3.8 Comparison of macroeconomic effects of the two different simulations[24].

Comparison of outcomes		EU-US NTM study (DG Trade), including new results		EU-US FTA study (EZ)
		Ambitious, LR	Limited, LR	Long run
Real income, bn Euro	European Union - 26	117.4	51.7	34.9
	The Netherlands	4.1	1.8	1.4
	United States	40.8	18.3	24.1
Real income, % change	European Union - 26	0.73	0.32	
	The Netherlands	0.72	0.32	
	United States	0.28	0.13	
Real wages, % change (unskilled)	European Union - 26			0.5
	The Netherlands			0.5
	United States	0.35	0.16	0.3
Real wages, % change (skilled workers)	European Union - 26			0.5
	The Netherlands			0.5
	United States	0.38	0.17	0.3
Value of exports, % change	European Union - 26	2.03	0.88	1.6
	The Netherlands	1.69	0.76	1.3
	United States	6.06	2.68	5.7
Value of imports, % change	European Union - 26	2.01	0.88	1.6
	The Netherlands	1.83	0.8	1.4
	United States	3.93	1.74	3.7
Terms of trade, % change	European Union - 26	0.07	0.03	-0.2
	The Netherlands	0.07	0.03	0.0
	United States	-0.23	-0.10	0.1

Whereas the impacts of the two simulations (a generic FTA versus ambitious NTM reduction) are similar at macro-economic level, this is not always the case at sector level. It might be that for certain sectors, tariff reductions might lead to decreases in output and export, whereas NTM reductions lead to increases and vice-versa. Such effects are explored for the selected top sectors in chapters 5, 6 and 7.

[24] Empty cells indicate that a result is not available for that indicator since it has not been modelled in the respective study.

4 Selection of three “top sectors” in the Netherlands

In order to focus the results and recommendations of this study, three out of the nine Dutch top sectors are selected for further analysis. For these three sectors the potential expected effects of an FTA between the EU and US are further analysed and elaborated in the following chapters.

4.1 Dutch policy on businesses and the top sector policy

In the coalition agreement of the recently resigned Cabinet-Rutte, the coalition partners have announced a new policy on the support of Dutch enterprises, which has gradually been applied throughout 2011. A key element in this new policy is the sectoral approach to the policy for the support of Dutch enterprises. An important reason for the sectoral focus is that both opportunities and barriers for growth of Dutch businesses are often sector specific and that both opportunities and barriers often touch upon several elements of government policies. The focus on sectors hence enables a more integrated approach to private sector development.

Within this policy focused on sectors, the Dutch government has identified several so-called ‘top sectors’, which are internationally competitive and have been selected on the basis of four criteria:

1. The sectors are knowledge-intensive and are characterised by a strong cooperation between entrepreneurs and knowledge institutes;
2. The sectors are export oriented and have a strong (world) market position;
3. The sectors are strongly regulated and have many specific laws;
4. The sectors have the potential to contribute to solving nationwide societal issues.

Based on these four criteria, Dutch policy is centred on the following nine top sectors:

- Agro-food;
- Horticulture and plant propogation materials;
- High-tech systems and materials;
- Logistics;
- Creative industry;
- Water;
- Life sciences and health;
- Chemicals;
- Energy.

Across sectors, the Netherlands as a location for international headquarters has also been recognised as an important cross cutting topic, due to the fact that headquarters can deliver a positive contribution to skill intensive employment and the economic image of the Netherlands.

In the past years, the nine top sectors (+ headquarters) have been thoroughly investigated by ‘top teams’, consisting of representatives from businesses, knowledge institutes and the government. These top teams have advised the government on how to proceed with the nine top sectors in the coming years. The scope of the policy and strategies are primarily focussed on increasing the knowledge intensity in the sectors. Furthermore, every top sector has specifically looked into measures or initiatives to improve the economic efficiency and effectiveness of the respective top sector. For example, certain sectors (creative industry, high-tech systems and materials, agro-food, horticulture and base materials and water) have made concrete plans for improving their competitive position on the world market.

The overall policy of the government for Dutch businesses will be improved further, using the plans in every top sector as a guidance. Collaboration between Dutch businesses, knowledge institutes and the government (the so-called Golden Triangle) will constitute a very important element in the formation of new policies.

4.2 Selection criteria

The following selection criteria are applied to select the three top sectors for further focus:

1. *The share of the top sector in total exports of the Netherlands.* This criterion serves to select sectors that are important export sectors for the Netherlands, and assumingly equally important in bilateral trade between the Netherlands and US (due to lack of matching data, total exports of the Netherlands have been used rather than Dutch exports to the US only);
2. *The share of the top sector value added in Dutch total GDP.* This criterion serves to select sectors that are important for the Dutch economy;
3. *The existence of trade barriers in a top sector*. This criterion assesses the current levels of restrictiveness in a top sector;
4. *The estimated benefits from aligning EU-US NTMs in a top sector*. This criterion serves to select sectors that will potentially gain significantly from removing barriers.

As mentioned in section 1.2, severe data limitations exist especially due to lack of statistical classification of the top sectors. Therefore, a “matching” exercise has been performed for the purposes of this study based on most recent information available and to the best of our knowledge at present. In order to ensure traceability of the outcomes in the face of the limitations, data sources and classifications used are clearly specified. Annex B provides an overviews of data sources and classifications used.

4.3 Criterion 1: Share of top sector exports in total NL exports

Due to the indicated data limitation especially regarding statistically matching existing sector classifications to the top sectors, data on exports of the top sectors to the world – rather than to the US specifically – are used under this criterion.

Dutch export shares to the world (%) based on GTAP classification have been used. The 20 GTAP sectors for which this data is available have been matched to the top sectors by Ecorys, based partly on Dialogic (2011) and CBS (preliminary, 2012). See Annex B for details.

The resulting numbers are presented in Table 4.1. Based on these proxies, the top sectors are ranked (relative score) for the purposes of selection.

Table 4.1 Export share of top sectors in total Dutch exports

Top sector	GTAP-20	% of GTAP sector relevant for top sector	NLD export share, %	Adjusted total export share top sector, %	*Relative score*
Agro-Food	Agr, forestry, fisheries	60%	10.1%	10.2%	+
	Processed foods	30%	12.2%		
	Other services	10%	5.0%		
Horticulture	Agr, forestry, fisheries	20%	10.1%	4.4%	+/-
	Processed foods	20%	12.2%		

Top sector	GTAP-20	% of GTAP sector relevant for top sector	NLD export share, %	Adjusted total export share top sector, %	*Relative score*
High tech systems & materials	Metals and metal products	60%	5.4%	10.9%	+
	Electrical machinery	60%	1.3%		
	Motor vehicles	60%	2.9%		
	Other machinery	60%	7.3%		
	Other transport equipment	60%	1.2%		
Energy	Other primary sectors	90%	3.9%	4.5%	+/-
	Other services	20%	5.0%		
Logistics & transport	Air transport	100%	2.2%	6.1%	+/-
	Water transport	100%	0.9%		
	Other business services	20%	10.1%		
	Other services	20%	5.0%		
Creative industries	Communications	50%	1.2%	1.3%	-
	Personal services	25%	0.8%		
	Other services	10%	5.0%		
Life sciences& health	Chemicals	10%	16.3%	2.6%	-
	Other manufactures	5%	15.3%		
	Other services	5%	5.0%		
Chemicals	Chemicals	60%	16.3%	10.0%	+
	Other services	5%	5.0%		
Water	Construction	50%	0.9%	1.2%	-
	Other transport equipment	20%	1.2%		
	Other services	10%	5.0%		

Source: Ecorys own elaborations based on GTAP 8.0 data.

4.4 Criterion 2: Share of top sector value added total NL GDP

For criterion 2, the figures on the share of each top sector in total Dutch GDP are taken directly from Dialogic (2011). The resulting relative score and ranking are presented in Table 4.2.

Table 4.2 Contribution of top sectors in total Dutch GDP

Top sector	% of NL GDP	Relative score
Agro-Food	4.4	+
Horticulture	1.4	-
High tech systems & materials	6.7	+
Energy	3.4	+/-
Logistics & transport	3.4	+/-
Creative industries	1.6	-
Life sciences& health	3.7	+
Chemicals	2.2	-
Water	0.4	-

Source: Dialogic (2011), Nederlandse clusters in kaart gebracht; Landbouw Economisch Instituut, Het Nederlandse Agrocomplex.

4.5 Criterion 3: The existence of trade barriers in a sector

For this criterion, the sectoral levels of restrictiveness estimated in the EU-US NTM study are used. Restrictiveness levels are expressed in trade cost equivalents (TCEs, %) – they indicate the estimated percentage cost increases to trade and investments across the Atlantic (in this case for trade flows from the EU to the US) stemming from regulatory divergence and NTMs.

The 23 GTAP sectors from the EU-US study have again been matched to the top sectors through weighted averages by Ecorys – see Annex B.

Table 4.3 Restrictiveness levels due to NTMs from EU to US

Top sector	GTAP-20	GTAP-23 (NTM)	Restrictiveness level NTMs (TCE)	% of GTAP-20 sector relevant for top sector	Restrictiveness level NTMs top sector (TCE)	Relative score
Agro-Food	Agr, forestry, fisheries	-	-	60%	73.3%	+
	Processed foods	Food & Beverages	73.3%	30%		
	Other services	-	-	10%		
Horticulture	Agr, forestry, fisheries	-	-	20%	73.3%	*(together with agro-food)*
	Processed foods	Food & Beverages	73.3%	20%		
High tech systems & materials	Metals and metal products	Metals	17.0%	60%	16,8%	+
	Electrical machinery	Electronics	6.5%	60%		
	Motor vehicles	Automotives	26.8%	60%		
	Other machinery	Machinery		60%		
	Other transport equipment	Machinery		60%		
Energy	Other primary sectors	-		90%		?
	Other services	-		20%		
Logistics & transport	Air transport	Transport (air)	*2.0%*	100%	5.0%	+/-
	Water transport	Transport (water)	*8.0%*	100%		
	Other business services	Other business services	-	20%		
	Other services	-		20%		
Creative industries	Communications	Communications	1.7%	50%	2.2%	-
	Personal services	Personal, cultural & recreational services	2.5%	25%		
	Other services	*Other business services*	*3.9%*	10%		

Top sector	GTAP-20	GTAP-23 (NTM)	Restrictive-ness level NTMs (TCE)	% of GTAP-20 sector relevant for top sector	Restrictive-ness level NTMs top sector (TCE)	Relative score
Life sciences& health	Chemicals	*Pharmaceuticals*	9.5%	10%	9.5%	+/-
	Other manufactures	-	-	5%		
	Other services	-		5%		
Chemicals	Chemicals	Chemicals	21.0%	60%	21.0%	+
	Other services	-	-	5%		
Water	Construction	Construction	2.5%	50%	2.5%	-
	Other transport equipment	Machinery	-	20%		
	Other services	-	-	10%		

Source: Ecorys own elaborations based on GTAP 8.0 data and Ecorys (2010) NTM study.

4.6 Criterion 4: The potential benefits from aligning EU-US NTMs in a sector

Criterion 4 scores the top sectors based on the potential benefits from aligning NTMs, as estimated by the EU-US NTM study. The expected change in export values at sector level are taken as a basis for this. The GTAP classification is again matched through weighted averages to the nine top sectors. The results are presented in Table 4.4.

Table 4.4 Change in export value due to EU-US NTM alignment

Top sector	GTAP-sector	% of GTAP-sector relevant for top sector	Change in value of exports, NL, €m	*Weighed total change in export value top sector,* €m	*Relative score*
Agro-Food	Agr, forestry, fisheries	60%	-523,7	512,3	**+**
	Processed foods	30%	2755,4		
	Other services	10%	-1,1		
Horticulture	Agr, forestry, fisheries	20%	-523,7	446,3	**+/-**
	Processed foods	20%	2755,4		
High tech systems & materials	Metals and metal products	60%	381,7	532,5	**+**
	Electrical machinery	60%	-268,1		
	Motor vehicles	60%	1243,2		
	Other machinery	60%	-697,3		
	Other transport equipment	60%	228,0		
Energy	Other primary sectors	90%	-16,5	-15,0	**-**

Top sector	GTAP-sector	% of GTAP-sector relevant for top sector	Change in value of exports, NL, €m	*Weighed total change in export value top sector, €m*	*Relative score*
	Other services	20%	-1,1		
Logistics & transport	Air transport	100%	50,8	129,5	**+/-**
	Water transport	100%	30,2		
	Other business services	20%	243,3		
	Other services	20%	-1,1		
Creative industries	Communications	50%	11,6	-1,7	**-**
	Personal services	25%	-29,7		
	Other services	10%	-1,1		
Life sciences& health	Chemicals	10%	3855,5	372,2	**+/-**
	Other manufactures	5%	-266,6		
	Other services	5%	-1,1		
Chemicals	Chemicals	60%	3855,5	2313,2	**+**
	Other services	5%	-1,1		
Water	Construction	50%	4,9	48,0	**-**
	Other transport equipment	20%	228,0		
	Other services	10%	-1,1		

Source: Ecorys own elaborations and Ecorys (2010) NTM study.

4.7 Final top sector selection

The resulting rankings of the nine top sectors on each of the four criteria assessed above have been summarised in Table 4.5.

Table 4.5 Summary table of selection criteria

Sector	Cr 1 Exports	Cr 2 GDP	Cr 3 Restrictiveness	Cr 4 CGE	*Total*
Agro-Food	+	+	+	+	**+**
Horticulture	+/-	-	*(together with agro-food)*	+/-	**+/-**
High tech systems & materials	+	+	+	+	**+**
Energy	+/-	+/-	?	-	**-**
Logistics & transport	+/-	+/-	+/-	+/-	**+/-**
Creative industries	-	-	-	-	**-**
Life-sciences & health	-	+	+/-	+/-	**+/-**
Chemicals	+	+/-	+	+	**+**
Water	-	-	-	-	**-**

Based on these rankings and in close consultation with the Ministry of EA&I, the following top sectors have been selected for further analysis:

1. Agro-food / Horticulture (combined);
2. High-tech systems & materials;
3. Chemicals.

The remainder of this study focuses on these top sectors.

5 Identification and prioritisation of trade barriers in the Agro-food & Horticulture sector

5.1 About the sector

5.1.1 Introduction

The agro-food (AF) and horticulture top sectors are two separate top sectors, but for this study they are combined (AF&H sector) as there are clear linkages between them and they partly face the same challenges when entering the US market.

The AF&H sector is qualified by Dialogic (2011)[25] as including:

1. Agriculture (including flowers) and fishery;
2. Processing industry (food, beverages and tobacco);
3. Activities related to (1) (production of fertilisers & chemicals, auctions);
4. Activities related to (2) (machinery and trade negotiation).

Both top sector teams share a focus for the future on durability, health, international market leadership and higher added value. Because of their similarities close collaboration exists throughout the chain of production. This has also resulted in a joint approach to contribute to the issue of food security.[26] At the same time, it is important to stress the variety of products and services covered by both top sectors: ranging from new plant varieties to live animals, from cut flowers to processed food, as well as the associated wholesale and retail trade. Obviously the different types of products each face their own challenges in international trade and investment.

According to the AF top sector team, this sector is exporting a little over €49 billion, accounting for 7.5% of worldwide AF exports, second only to the United States.[27] Horticulture is also a large exporting sector, the Netherlands being the third exporter in the world, after Spain and the United States.[28]

5.1.2 Trade and Investment relations between the Netherlands and the US in the sector

As shown in the previous chapter (table 4.1), the AF&H sector accounts for a significant share of total Dutch exports (over 14 percent). Various AF&H products are among the top Dutch export products to the US, notably beer, but also products like vegetable seeds and flower bulbs. The US is also an important supplier of AF&H products to the Netherlands, e.g.in tobacco, soya beans and almonds (See Annex C for an overview)[29]. Despite these trade relations, the interviews revealed that in relative terms, the US is generally not considered a key export market, accounting for less than two percent of total exports of most subsectors (e.g. the dairy sector, fruits & vegetables sector, cut flowers). Only the flower bulbs and plants association Anthos refers to a larger share of exports to the US, although this relative share is becoming less with the increasing importance of emerging countries in South-East Asia.

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25 Dialogic (2011) “Nederlandse clusters in kaart gebracht”.

26 Topsector team Agro&food (2012), “Internationaliseringsinitiatief topsector Agro&food”.

27 Topsector team Agro&food (2012), “Internationaliseringsinitiatief topsector Agro&food”.

28 Topsector team Horticulture (2011) “Bron voor groene eonomie”.

29 The information on trade in this chapter is based on Comtrade data, which only cover trade in goods, not services. Annex C only presents the data at HS2 level.

With respect to investment relations, the US has approximately €20.5 billion (FDI stocks) invested in the Dutch Agro-food/Horticulture sector based on 2011 data from De Nederlandse Bank[30], whereas the Netherlands has a little over €3 billion (FDI stocks) invested in the American Agro-food/Horticulture sector.

5.2 Identification of trade barriers

We identified the relevant barriers for the sector on the basis of the following sources: 1) the market access database (MADB) of the EU; 2) the Ecorys EU-US NTM study; 3) other literature[31]; and 4) interviews with stakeholders in the sector. All relevant information of the first two sources is included in Annex D.

5.2.1 Tariff barriers

Overall tariffs between the EU and US are generally low. Tariffs in the sector are often specific (e.g. related to specific quantity, not only % (ad valorem) duties). Wen looking at the tariff, we therefore look at the Ad Valorem Equivalents (AVE).[32] The weighted average tariff[33] for the AF&H sector amounts to 2.1 percent (1.8 percent for Agro-food and 3.4 percent for horticulture products). Nevertheless, the sector still has the highest tariffs for some specific products. This is reflected in the two tables below. Table 5.1 indicates the products that pay the highest tariffs in absolute terms, whereas table 5.2 shows the products with the highest AVEs.

Table 5.1 AF&H: Top 10 absolute tariffs paid per productgroup (HS6)

Sector	Product	AVE[34]	AVE * Trade value, US dollars
A	Cheese nes*.	17.8%	9,324,605.83
H	Vegetables, fresh or chilled nes*.	11.6%	3,757,076.32
A	Food preparations, n.e.s.*.	10.7%	3,702,720.2
H	Fresh cut flowers and buds, of a kind suitable for bouquets or for ornamental purposes (excl. roses, carnations, orchids, chrysanthemums and gladioli).	6.4%	3,636,349.95
A	Sugars in solid form, incl. invert sugar and chemically pure maltose, and sugar and sugar syrup blends containing in the dry state 50% by weight of fructose, not flavoured or coloured, artificial honey, whether or not mixed with natural honey and caramel (excl. cane or beet sugar, chemically pure sucrose, lactose, maple sugar, glucose, fructose, and syrups thereof).	16.7%	3,350,546.55

30 http://www.statistics.dnb.nl/index.cgi?lang=nl&todo=Balans Table 12.6.1 / 12.6.2.

31 Various documents were studied, but additional barriers were only taken from FoodDrinkEurope, European Food and Drink industry recommendations for the EU-US high-level group on growth and jobs, position paper, 23 April 2012.

32 For the definition of AVEs by the International Trade Center see:
http://www.trademap.org/stGlossary.aspx
http://www.macmap.org/SupportMaterials/Methodology.aspx

33 Calculated using data on HS6 level from the following:
Tariff data: Data source: ITC tariff data (MAcMap); year 2011; AVE estimation methodology: AVE World Tariff Profile
Trade data: Data source: Comtrade; year 2010; valuation: in Dollars, FOB; Query [reporter: 528; partner; 842; period: 2010; classification: as reported]
Tariff paid HS6 = trade value HS6 * AVE HS6
Weighted average(sector) = sum(all tariffs paid in the sector)/sum(all value of trade in sector)

34 AVE based on World Tariff Profile

Sector	Product	AVE[34]	AVE * Trade value, US dollars
A	Sugar confectionery not containing cocoa, incl. white chocolate (excl. chewing gum).	11.8%	2,210,790.42
A	Live horses, asses, mules and hinnies (excl. pure-bred for breeding).	2.8%	2,200,466.44
A	Smoking tobacco, whether or not containing tobacco substitutes in any proportion.	120.9%	1,635,583.56
H	Bulbs, tubers, tuberous roots, corms, crowns and rhizomes, dormant (excl. those used for human consumption and chicory plants and roots).	1%	1,550,514.19
H	Peppers of the genus Capsicum or of the genus Pimenta, fresh or chilled.	2%	1,268,115.40

*: nes= not elsewhere specified.
Source: Macmap and Tradecom.

Table 5.2 AF&H: Top 10 absolute tariffs paid per productgroup (HS6)

Nr.	Product	AVE[35]	AVE * Trade value, US dollars
1	Smoking tobacco, whether or not containing tobacco substitutes in any proportion.	120.9%	1,635,583.56
2	Ground-nuts, prepared or preserved (excl. preserved with sugar).	66.8%	28,351.26
3	Tobacco, unmanufactured, partly or wholly stemmed or stripped.	66.2%	70,241.51
4	Tobacco refuse.	50.0%	177,726
5	Fructose&fructose syrup nes, cntg in dry state >50% by wght of fructose.	30.9%	211,472.80
6	Prep of cereals, flour, starch/milk f infant use, put up f retail sale.	26.8%	28,080.77
7	Onions dried but not further prepared.	25.6%	6,790.66
8	Fresh cheese, i.e. unripened or uncured cheese, incl. whey cheese, and curd.	25.1%	414,466.51
9	Milk and cream powder unsweetened exceeding 1.5% fat.	24.2%	633,911.74
10	Yogurt, whether or not flavoured or containing added sugar or other sweetening matter, fruits, nuts or cocoa.	24.2%	5,135.48

Source: Macmap and Tradecom.

5.2.2 Non-tariff barriers

As for most products, tariffs are already relatively low, and non tariff measures have become much more important for the sector. The following tables provides an overview of the relevant non tariff barriers identified in this study, divided into sector-specific and cross-cutting barriers. It should be noted that these barriers come from different sources (as indicated in the last column) and that there is some overlap between them. We have only removed the most obvious duplications and the ones where we have information that they are no longer relevant.

[35] AVE based on World Tariff Profile.

Annex D contains the information on the NTMs as found in the relevant sources. For the ones from the MADB, there is a description of what the NTM entails. Some of the NTMs of FoodDrinkEurope have a forward-looking character (risk of becoming an NTM).

Table 5.3 Identified barriers for the Agrofood and Horticulture sector

Nr.	Barrier	Source
Sector specific non-tariff measures		
1	Agricultural export subsidies and promotion	MADB
2	Export Credit Guarantee Program	MADB
3	Farm bill	MADB
4	IPR: inadequate protection of GIs	MADB
5	Marine Mammal Protection Act	MADB
6	(Requirements for) Pasturised Milk Products-Grade A	MADB
7	Rules for import of dairy products into USA	MADB
8	Sanitary measures applied by USA for imports of live bivalve molluscs	MADB
9	Slow procedures on applications to allow import of new types of plant products	MADB
10	United States- Bovine animals and products	MADB
11	US Wine tax discrimination with rebates only available to small US producers	MADB
12	Wine Distribution- no direct sales to retailers in some states	MADB
13	Custom surcharges	Ecorys NTM study
14	Direct and indirect government support by means of subsidies, protective legislation and tax policies to US farmers	Ecorys NTM study
15	US product standards which differ from international standards	Ecorys NTM study
16	US prohibition to register/renew a trademark or a trade name which is identical or similar to a trademark or a trade name used in connection with a confiscated business	Ecorys NTM study
17	Implementation of Food Safety Modernisation Act: re-inspection fees	FoodDrinkEurope
18	Food Safety Modernization Act- foreign supplier verification program	FoodDrinkEurope
19	Dairy import assessment (levy) and its potential impact on composite products	FoodDrinkEurope
20	Requirements for eggs and risk for more stringent requirements for Import of products containing eggs	FoodDrinkEurope
21	Import restrictions of uncooked meat products	FoodDrinkEurope
22	Tariff quotas on Milk Protein Concentrates and casein/caseinates	FoodDrinkEurope
23	Stringent requirements for approval of meat-processing facilities	FoodDrinkEurope
24	Lack of harmonisation within the US	FoodDrinkEurope
Horizontal non tariff measures		
25	Classification and labelling differences between the EU and US	Ecorys NTM study
26	Diverging technical standards	Ecorys NTM study
27	Environmental regulations (e.g. EU Emission Trading Scheme)	Ecorys NTM study
28	Intellectual property rights differences between the EU and US	Ecorys NTM study
29	Restrictions in Government procurement (e.g. the Buy American Act, ARRA and SBA)	Ecorys NTM study
30	Anti-dumping measures: practice of zeroing	MADB
31	Berry Amendment to the 1941 Defence Appropriations Act	MADB
32	Byrd Amendment (Continued Dumping and Subsidy Offset Act)	MADB
33	Container Security Initiative (CSI)	MADB

Nr.	Barrier	Source
34	FDI limitations imposed by the CFIUS / FINSA framework	MADB
35	Helms-Burton Act	MADB
36	Hormones Dispute (Continued Suspension of Obligations)	MADB
37	Lacey Act - Scope and implementation of the US legislation to combat illegal logging	MADB
38	Principle of First-to-Invent	MADB
39	Procurement: Buy American Act	MADB
40	Section 407 of the Trade and Development Act (Carousel Law)	MADB
41	Small Business Act	MADB
42	U.S. Customs Refusal of EU Origin ("Made in EU")	MADB

5.3 Prioritisation of trade barriers: Dutch interests

The list of barriers that are potentially important for the AF&H Sector is very long. In order to get an idea of which barriers or areas of negotiations to focus on, we have carried out a prioritisation exercise the results of which are presented in Table 5.4 below (please note that this table is ranked alphabetically by broader area, not in order of priority). This exercise includes the following steps:

1. We have only included those barriers in the list that are mentioned as important by at least one of the interviewees (column 3)[36];
2. For the barriers that are included in the table, we indicated the priority, based on the NTM business survey and the interviewees responses. We use a three point-scale for this, *High (H)* = listed by more than one source AND indicated as priority for at least one source, OR indicated at least once as top priority (ranked first).; *Medium (M)* = listed by more than one source OR indicated as priority (but not the highest) by one source; *Low (L)* = listed by one source but not as priority (column 6);
3. As the barriers are often not relevant for the entire sector, but only for a number of specific products, we indicate for which part of the top sector the barrier is relevant (column 4);
4. We also looked at the relative importance of these specific products / sub-sectors in total Dutch exports of the AF&H top sector to the US.[37] As the exports of beer dominate Dutch exports, we exclude the food and beverages when looking at the shares of different products in total exports. We use a four point scale, where 1 means that the products accounts for less than 5 percent of the AF&H exports, excluding food and beverages, 2 between 5 and 10%, 3 between 10 and 50% and 4 between 50 and 100% (column 7).

[36] Also the earlier mentioned position paper of FoodDrinkEurope was used for this.

[37] As before, Comtrade data are used to look at trade flows, which only capture the goods part of the top sector, not services trade.

Table 5.4 Prioritisation of barriers

No.	Broader area	Barrier	Subsectors for which the barrier is relevant	Effect of the barrier	Priority for relevant Interviewees. H=high, M=medium, L= low	Importance product in NL-US trade (1= lowest, 4 = highest)
1	Customs and border measures.	Import duties.	Cross-cutting measure, although affecting different subsectors to various extents.	Direct cost effect, making Dutch products relatively expense vis-à-vis domestic or NAFTA products.	H	4
2		Customs surcharge for imported dairy products, used for dairy sales promotion, research and education.	Dairy products.	Foreign companies can hardly participate in the initiatives funded by the levy.	M	2
3		Tariff rate quota.	Dairy, food products (sugar-related).	Direct cost effect and quantity restricting effects.	M	2
4		Custom border procedures.	Cross-cutting measure.	Extensive administrative requirements, long waiting times.	H	4
5		Limited points of entry.	Dairy, flowers and plants.	Higher transport costs as most efficient routes are not always possible.	M	2
6	Import licenses.	Import licenses.	Cross-cutting measure.	Administrative requirements, not difficult to comply with.	H	4
7	Intellectual Property Rights (IPR).	Lack of IPR protection/geographical indications.	Processed food.	Loose of competitive advantage due to reduced exclusivity.	M	1
8	Health and Safety standards.	Slow processing of Product-Risk Assessment (PRA) application.	New plant products.	Long waiting times.	H	2
9		Lack of transparent quarantine list.	Living organisms, notably plants and flowers.	Uncertainty and risk of gassing exports.	M	2-3
10		Pre-shipment inspections.	Cross-cutting measure.	Additional.	M	4

No.	Broader area	Barrier	Subsectors for which the barrier is relevant	Effect of the barrier	Priority for relevant Interviewees. H=high, M=medium, L= low	Importance product in NL-US trade (1= lowest, 4 = highest)
11		SPS: greenhouse requirements.	Fruits & vegetables.	Stringent requirement on greenhouses to prevent certain risk (e.g. African fly on paprika), limiting the export amount significantly.	M	3
12		SPS: Grade A.	Dairy.	Very complex and lengthy procedures making it practically impossible to export.	H	2
13		SPS: sand and soil.	Trees and pot plants.	Trees and pot plants cannot enter the US because of risk for diseases possibly present in sand or soil- prohibitive effect.	M	3
14		Differences in EU-US (SPS) rules.	Various subsectors.	Additional administrative requirements.	M	4
15		Differences in rules and regulations between States.	Various subsectors.	Additional state-level requirements, loose of scale economies due to different requirements, administrative requirements.	H	4
16		SPS: bovine meat (BSE).	Beef.	Products are not allowed to enter US because of risk for BSE- prohibitive effect.	H	1
17		SPS: Avian influenza.	Poultry.	Limits quantity of exports, can be prohibitive.	M	1
18		Import restrictions on uncooked meat.	Meat.	Limits quantity of exports.	L	1
19		Stringent requirements in approval for meat processing facilities from the US veterinary services.	Meat.	Requires investments in time and money from the complete food chain.	L	1
20	State Aid.	State Aid.	Various subsectors.	Domestic products in higher quantities and/or lower prices.	M	4
21	Technical regulations, standards and	Transport and packaging requirements.	Processed foods.	Loose of scale economies due to different requirements, administrative requirements.	L	2-3

No.	Broader area	Barrier	Subsectors for which the barrier is relevant	Effect of the barrier	Priority for relevant Interviewees. H=high, M=medium, L= low	Importance product in NL-US trade (1= lowest, 4 = highest)
	certification.					
22		Technical regulations: consumer information.	Processed foods.	Loose of scale economies due to different requirements, administrative requirements.	L	2-3
23		Country of origin labelling.	Processed foods.	Not an issue yet but could become one in the future, as it makes it easier to for companies to refuse goods not produced in the US.	L	2-3

As can be seen from the table, most barriers for the AF&H sector relate to the two broader areas of customs & border measures and health & safety requirements. The latter primarily relate to SPS measures which clearly constitute the main non-tariff barrier for trade with the US.[38]

When looking one level deeper, at the specific barriers, the ones that are most important to the interviewees (priority=H) and affect a large part of the sector's total exports to the US (importance of product in AF&H exports to the US=4):

- Import duties;
- Custom border procedures;
- Import licenses;
- Differences in regulations in US States.

Not surprisingly, these are barriers that affect almost the entire sector and are of a horizontal nature. A number of observations and considerations have to be kept in mind with respect to these specific barriers. With respect to import duties, there is large variation in the height of tariffs depending on the product, but the trade-restricting effects of a tariff also depends on the competitive situation for a certain sub sector: if the margins are low, even a relatively low tariff can make a difference. The slow border procedures and associated requirements are a widely shared concern, and the lack of qualified staff has also been mentioned as a problem hindering exports. Import licenses are obligatory and while their elimination would reduce the administrative requirements associated with exporting, the interviewees also indicated that they are relatively easy to comply with. Finally, there are clear differences in regulations between States, and States can have their own additional requirements.

There is also a group of barriers that are considered a high priority, but affect a much smaller part of the current trade, often because they are sector-specific barriers. We consider it important to take these into account as well, because the current trade flows are partly determined by the height of the barriers (the so-called endogeneity problem). This is relevant for the stringent requirements for pasteurised milk products (grade A), the slow processing of Product-Risk Assessment (PRA) applications for new plant varieties and the ban of beef due to BSE.

5.4 Conclusions on priority barriers: linking Dutch priorities to the EU negotiation position

In the previous section we identified the main Dutch priority barriers in the AF&H sector to address in a possible EU-US FTA. These are:

- Import duties, especially for subsectors where they matter most (highest tariffs and/or small margins);
- Dairy Grade A;
- Ban on beef (BSE);
- Slow processing of Product-Risk Assessment (PRA) applications for new plant varieties;
- Differences in regulations between States;
- Custom border procedures;
- Import licenses.

[38] Differences in EU-US SPS measures are not given the highest priority, but medium priority, which can be explained by the fact that that there are also other, more specific SPS related barriers included in the table.

Some considerations for effectively tackling the priority barriers

Some of the priority barriers will be more easy to tackle than others in an FTA. The chance to tackle the issue will depend on two main factors: 1) the support in the EU to get the issue high on the negotiating agenda; 2) the political will in the US to address the issue.

It goes beyond the scope of this study to make a detailed assessment of these factors, as this would require consultations also with players outside the Netherlands. Nevertheless, there are some things that we can say about it on the basis of existing studies and the interviews.

With respect to EU support to get the issue on the agenda, we observe that none of the barriers identified are only applicable to the Netherlands - other EU member states will also face these barriers when exporting to the US. The relevance of the barrier for other EU countries thus mainly depends on the economic importance of the products that are affected by the barrier. In that respect, the horticulture sector (especially plant propagation material) expressed concerns over their priority barriers as the sector is not as important in other EU countries as it is in the Netherlands.

It is also important to realise that some of the barriers did not get priority of the stakeholders, as they knew these would already be defended by other countries. An example in this respect is the lack of protection of products with geographical indications (relevant for example for Gouda Holland cheese), which is likely to be actively pursued by Southern EU member states like Italy and France.

With respect to the political will in the US, it will be very difficult to remove the ban on beef related to their concerns over BSE given the lack of progress on this issue but also given the EU barriers to certain meat products from the US (like the ban on chlorine-washed chicken). More generally, it will be important to take into account the EU barriers to US products to assess what could be offered to the US in return for removing certain barriers. This is especially relevant for the AF&H sector, given the support and protection this sector gets in the EU (notably through the Common Agricultural Policy).

The EU-US NTM study considered the action ability of differences in regulations between states with respect to food safety to be very limited.

Linking Dutch priorities to the FTA

In practice, it will be difficult to focus only on individual barriers. We therefore link the identified priority barriers to the likely elements of an FTA as formulated in the Interim Report of the High-Level Working Group to put them in a broader perspective. This is presented in Table 5.5 below. Taking into account the above considerations on the possibility of effectively removing certain barriers, we put the barriers that seem to be more difficult in *italics*.

Table 5.5 only includes the priority barriers to ensure focus. It is nevertheless good to be aware of the other relevant barriers listed in Table 5.4, when the broader issues are discussed in EU context. Especially the SPS chapter is important for the AF&H sector, and mutual recognition or equivalence of SPS measures would greatly benefit the sector.

Table 5.5 Linking Dutch priority barriers to FTA elements

No	FTA element	Dutch priorities
1	Tariffs	Reduce/eliminate remaining import duties, especially in subsectors where they matter most (highest tariffs and/or small margins).
2	SPS plus chapter	• Dairy Grade A; • *Ban on beef (BSE);* • Slow processing of Product-Risk Assessment (PRA) applications for new plant varieties
3	TBT plus chapter	
4	Horizontal disciplines on regulatory coherence and transparency	*Differences in regulations between States.*
5	Specific agreements on regulatory compatibility for specific sector	
6	Services	
7	Investment	
8	Procurement	
9	Intellectual Property	
10	Rules	• Custom border procedures; • Import licenses.

6 Identification and prioritisation of trade barriers in the High-tech Systems & Materials sector

6.1 About the sector

The High Tech Systems & Materials (HTSM) sector consists of companies that focus on the research and development of new materials and systems as well as their production. According to the cluster specification of Dialogic[39] the sector is made up of three parts, including:

1. Materials (in primary form);
2. Systems (metal products, computers, machinery, etc.);
3. Related activities (trade, design, testing, etc.).

This is clearly a very broad sector with many sub-sectors. It includes e.g. glass and ceramics, steel and non-ferrous metals, but also aerospace, automotives and other transport product industries, electro technical industries and electronic and communication equipment industries, defence and security industries, medical equipment and instruments – even high-tech textiles could be grouped under this sector and likewise high-tech segments of other industries may face fairly similar problems and issues.

According to the HTSM top-team reports, the HTSM sector had an added value of €26 billion in 2008 and €23 billion in 2009, however, the Dialogic study puts this number at more than €40 billion. The sector is estimated to employ between 390,000 (HTSM top team) and 520,000 (Dialogic) people. According to Comtrade data the sector's exports (goods only) to the US amounted to €8.8 billion in 2010, and accounted for approximately 40% of all Dutch goods exports to the US.

The larger high-tech companies usually offer integrated solutions, providing both the specifications for products as well as the actual product. SMEs are mostly suppliers to this process. Most of the sector's markets lie abroad, the US being one of the main export destinations.[40]

According to the HTSM top-team, the HTSM sector is also the largest with regards to R&D investment – accounting for an estimated 50% of all Dutch R&D. Most high tech companies are characterised by high R&D expenditures of up to 20% of business revenues. Despite economies of scale these costs will probably increase, since the increasing complexity of new high-tech increasingly also requires suppliers to invest and engage in R&D and innovation. The total amount of R&D investments for the sector will thus increase, despite efficiency gains through scale economies. The Dutch HTSM sector co-operates closely with knowledge institutes. All three of the Dutch technical universities are ranked in the global top 10 of universities that collaborate most effectively with industry.[41]

The Netherlands is competitive on the world market of high-tech in several niches. For example Philips is leader in lighting and medical equipment, Fokker an international supplier for the construction and maintenance of airplanes and NXP is one of the leading companies in the production of chips.[42]

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39 Dialogic (2011) "Nederlandse clusters in kaart."

40 Holland High Tech. Advise Top Team High Tech Sysemen en Materialen (2011).

41 Ibid.

42 Adviesrapport High Tech.

Using data 2011 from De Nederlandse Bank[43], the US has approximately €2.2 billion (FDI stocks) invested in the Dutch High-Tech sector, whereas the Netherlands has close to€4.4 billion (FDI stocks) invested in the American High-Tech sector. According to the US Congressional Research Service, the Netherlands was the third biggest investor in the manufacturing industry.[44]

Sector strategy

The HTSM top-team has strong growth ambitions, particularly in international markets and has recently launched an internationalisation strategy, which includes the international ambitions of companies, research institutes and governments active in this sector. The ambition of the HTSM sector is to grow exports from its 2009 level of €32 billion to €77 billion in 2020. It sees on the one hand the profiling of the Netherlands as 'the place to be' for high-tech activities (business, research, studies, etc.) and on the other hands the benefitting from opportunities in emerging economies as important components of its strategy.

As part of this internationalisation strategy the Topsector HTSM has taken the initiative to develop a specific Holland High Tech branding strategy, with the aim of positioning the Netherlands as a global player in the high tech sector. The focus of this strategy is on a selected number (5) of target countries, including the US, in which the HTSM will aim to develop international R&D cooperation, trade and skills and engage in acquisition of businesses.

This branding strategy should be supplemented with a combined approach by the 'Golden Triangle'. Not only should knowledge institutes and the government carry out High Tech Holland internationally but they should also stimulate the development of domestic human capital, attract foreign human capital and increase research efforts by redistributing resources to fundamental and applied technological research.[45]

Addressing tariff and especially non-tariff barriers to trade and investments is thus both an integral part of this strategy for the sector and to an extent a condition for its success.

6.2 Identification of trade barriers

We Identified the relevant barriers to trade with the US for the sector on the basis of the following sources: 1) the market access database (MADB) of the EU; 2) the EU-US NTM study; 3) other literature / documents (e.g. industry position paper); and 4) interviews.

Tariff barriers

Overall tariffs between the EU and US are generally low. Tariffs in the sector are sometimes specific (e.g. related to specific quantity, not only % (ad valorem) duties). Wen looking at the tariff, we therefore look at the Ad Valorem Equivalents (AVE).[46] The weighted average tariff[47] for the HTSM sector is 2.6 percent, although some product groups have substantially higher tariffs. Table

[43] http://www.statistics.dnb.nl/index.cgi?lang=nl&todo=Balans Table 12.6.1 / 12.6.2.

[44] Jackson.J.K. (2012) Foreign Direct Investment in the United States: An Economic Analysis.

[45] Internationaliseringsoffensief (2011).

[46] For the definition of AVEs by the International Trade Center see:
http://www.trademap.org/stGlossary.aspx;
http://www.macmap.org/SupportMaterials/Methodology.aspx.

[47] Calculated using data on HS6 level from the following:
Tariff data: Data source: ITC tariff data (MAcMap); year 2011; AVE estimation methodology: AVE World Tariff Profile;
Trade data: Data source: Comtrade; year 2010; valuation: in Dollars, FOB; Query [reporter: 528; partner; 842; period: 2010; classification: as reported];
Tariff paid HS6 = trade value HS6 * AVE HS6;
Weighted average(sector) = sum(all tariffs paid in the sector)/sum(all value of trade in sector).

6.1 indicates the products that pay the highest tariffs in absolute terms, whereas table 6.2 shows the products with the highest AVEs.

Table 6.1 High Tech: Top 10 absolute tariffs paid per product group (HS6) weighted average 2.6396%

Nr.	Product	AVE[48]	AVE * Trade value in USD f.o.b.
1	Tools for drilling, other than for rock drilling.	5.4%	1,105,756
2	Parts and accessories for microscopes other than optical microscopes.	4.9%	988,943.5
3	Plates, tips & the like for tools of sintered metal carbides or cermets.	4.6%	4,111,555
4	Microscopes other than optical microscopes and diffraction apparatus.	3.5%	1,843,053
5	Machinery for the preparation of meat or poultry.	2.8%	1,043,395
6	Machinery and apparatus for isotopic separation and parts thereof, n.e.s. [Euratom].	2.6%	3,729,945
7	Ferro-silicon, containing by weight more than 55% of silicon.	2.6%	2,244,747
8	Ferro-chromium, nes.	2.5%	1,501,354
9	Engines, diesel, for the vehicles of Chapter 87.	1.3%	988,557.6
10	X-ray generators other than X-ray tubes, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like, and general parts and accessories for apparatus of heading 9022, n.e.s.	0.9%	1,082,801

Table 6.2 High Tech: Top 10 highest AVEs per product group (HS6) weighted average 13.757%

Nr.	Product	AVE	AVE * Trade Value ($ f.o.b.)
1	Glassware of glass-ceramics, of a kind used for table, kitchen, toilet, office, indoor decoration or similar purposes (excl. goods of heading 7018, cooking hobs, leaded lights and the like, lighting fittings and parts thereof, atomisers for perfume and the like).	16.5%	10,066.65
2	Glassware of a kind used for toilet, office, indoor decoration or similar purposes (excl. glassware of lead crystal or of a kind used for table or kitchen purposes, articles of heading 7018, mirrors, leaded lights and the like, lighting fittings and parts thereof, atomisers for perfume and the like).	15.2%	124,991.9
3	Unwrought titanium; titanium powders.	15.0%	61,474.65
4	Roofing tiles, ceramic.	13.5%	3,043.845
5	Glassware for table or kitchen purposes of glass having a linear coefficient of expansion <= 5 x 10 -6 per kelvin within a temperature range of 0°C to 300°C (excl. glassware of glass ceramics or lead crystal, articles of heading 7018, drinking glasses, glass preserving jars sterilising jars", vacuum flasks and other vacuum vessels)".	13.4%	1,599.558
6	Drinking glasses, stemware (excl. of glass ceramics or of lead crystal).	13.2%	346,470.4
7	Drinking glasses (excl. glasses of glass ceramics or of lead crystal and stemware).	13.2%	37,115.63

[48] AVE based on World Tariff Profile.

Nr.	Product	AVE	AVE * Trade Value ($ f.o.b.)
8	Tableware and kitchenware, of porcelain or china (excl. ornamental articles, pots, jars, carboys and similar receptacles for the conveyance or packing of goods, and coffee grinders and spice mills with receptacles made of ceramics and working parts of metal).	12.9%	29,770.49
9	Glassware for table or kitchen purposes (excl. glass having a linear coefficient of expansion <= 5 x 10 -6 per kelvin within a temperature range of 0°C to 300°C, glassware of glass ceramics or lead crystal, articles of heading 7018, drinking glasses, glass preserving jars sterilising jars", vacuum flasks and other vacuum vessels)".	12.6%	2,673.846
10	Glassware, of lead crystal, of a kind used for toilet, office, indoor decoration or similar purposes (excl. glassware of a kind used for table or kitchen purposes, glassware of glass-ceramics or lead crystal, articles of heading 7018, mirrors, leaded lights and the like, lighting fittings and parts thereof, atomisers for perfume and the like).	12.6%	1,336.986

Non-tariff barriers

As for most products, tariffs are already relatively low for HTSM products and non tariff measures (NTMs) have become much more important for the sector. The following table provides an overview of the relevant non tariff measures identified in this study, divided into sector-specific and cross-cutting barriers. It should be noted that these barriers come from different sources (as indicated in the last column) and that there is some overlap between them. We have only removed the most obvious duplications.

Table 6.3 Identified barriers for the HTSM sector

Barrier	Source
Sector specific NTMs	
International Traffic in Arms Regulations (ITAR)	Ecorys NTM study
Encryption Control Policy not in line with the Wassenaar arrangement (related to ITAR)	Ecorys NTM study
Dual-Use Export Controls	MADB
Memoranda of Understanding (Defence Acquisitions)	MADB
Safety of electrical and electronics products non-harmonised standards	Ecorys NTM study
Standards developed by different bodies (OSHA, National Electric Code and Industry safety standards)	Ecorys NTM study
Non-transparency of standards	Ecorys NTM study
State-wise certification according to Underwriters Laboratories	Ecorys NTM study
US product standards which differ from international standards	Ecorys NTM study
US state level safety certifications requirements	Ecorys NTM study
Conformity assessment procedures	Ecorys NTM study
Third party testing for import products with EU declarations of conformity	Ecorys NTM study
Medical Device User Fee	Ecorys NTM study
On-board equipment and instruments: Safety standards for Flight Guidance Systems and Proposed Revisions to "Automatic Pilot Systems Approval"	Ecorys NTM study
Restrictions on foreign launching services	Ecorys NTM study
Energy conservation Program for Commercial and Industrial Equipment (EPCA)	Ecorys NTM study

Barrier	Source
US support to aircraft engine manufacturers (aeronautics)	Ecorys NTM study
US support to Boeing	Ecorys NTM study
Very limited access of foreign companies to US government support programmes	Ecorys NTM study
Electrical and Electronic Equipment Barriers	MADB
Jones Act and Shipbuilding Subsidies	MADB
American Automobile Labelling Act	Ecorys NTM study
Civil Penalties for violations of statutes and regulations NHTSA pertaining to motor vehicle safety, bumper standards, and consumer information.	Ecorys NTM study
Corporate Average Fuel Economy (CAFE) Payment	Ecorys NTM study
Different cetane levels in diesel fuel between EU and US – leading costs to tune engines to these different levels	Ecorys NTM study
Gas Guzzler Tax	Ecorys NTM study
Steel Local Content Requirements	MADB
ATSC technology which is not compatible with DVB-T standards in EU	Ecorys NTM study
Relevant horizontal NTMs	
Threat of 100% container scanning	Ecorys NTM study
Container Security Initiative (CSI)	MADB
Reporting requirement on container transport: 10+2 regulation (Importer Security Filing)	Ecorys NTM study
Diverging technical standards	Ecorys NTM study
Registration with FDA and compliance with FDA quality system regulations (incl. medical devices)	Ecorys NTM study
Licenses requirements	Ecorys NTM study
Classification and labelling differences between the EU and US	Ecorys NTM study
US Customs Refusal of EU Origin ("Made in EU")	Ecorys NTM study
Transfer delays, slow custom procedures	Ecorys NTM study
Diverging regulations in EU and US patent systems	Ecorys NTM study
Principle of First-to-Invent (related to differences in IPR and patent systems)	MADB
Intellectual property rights differences between the EU and US	Ecorys NTM study
Environmental regulations	Ecorys NTM study
Restrictions in Government procurement (e.g. the Buy American Act, ARRA and SBA)	Ecorys NTM study MADB
Anti-dumping measures: practice of zeroing	MADB
Berry Amendment to the 1941 Defence Appropriations Act	MADB
Byrd Amendment (Continued Dumping and Subsidy Offset Act)	MADB
FDI limitations imposed by the CFIUS / FINSA framework	Ecorys NTM study
Helms-Burton Act	MADB
Iran Non-Proliferation Act	MADB
Iran-Libya Sanctions Act and Iran Freedom Support Act	MADB
Section 407 of the Trade and Development Act (Carousel Law)	MADB
Small Business Act	MADB
Nationality or residence requirements for staff	Ecorys NTM study
Requirements regarding professional qualifications for foreign firms	Ecorys NTM study
Restricted access to high speed internet connections for foreign firms	Ecorys NTM study
US legal liability philosophy	Ecorys NTM study

6.3 Prioritisation of trade barriers

The list of barriers that are potentially important for the HTSM sector is obviously very long. In order to get an idea of which barriers or areas of negotiations to focus on, we have carried out a prioritisation exercise the results of which are presented in Table 6.4 below (please note that this table is ranked alphabetically by broader area, not in order of priority). This exercise includes the following steps:

1. Under a number of broader themes / areas (column 2), we have only included those barriers in the list that are mentioned as important by at least one of the interviewees (column 3);
2. To account for the fact that we have not been able to speak to all relevant stakeholders, we have also included those barriers from the Ecorys EU-US NTM study which were considered as most pressing by the companies that participated in the business survey for this study (column 3);
3. As the barriers are often not relevant for the entire sector, but for a number of specific products / sub-sectors, we have indicated for which products / sub-sectors the specific barrier is most relevant (column 4) and we have given a brief description of the general effect of the barrier (column 5);
4. For the barriers that are included in the table, we indicated the priority, based on the NTM business survey (those barriers identified in the survey as of the highest priority) and the interviews, as well as on the outcomes of a survey by an industry association. We use a three point-scale for this, High (H) = listed by more than one source AND indicated as priority for at least one source, OR indicated at least once as top priority (ranked first).; Medium (M): listed by more than 1 source OR indicated as priority (but not the highest) by one source; Low (L) = listed by one source but not as priority (column 6);
5. Finally, we looked at the relative importance of these products in total Dutch exports of the HTSM top sector to the US.[49] While we have looked initially at HS 2-digit data, for the most dominant and broadest sub-sector (nuclear reactors, boilers and machinery, accounting for 46% of exports) we have also taken a closer look at HS 4-digit data to be able to be more precise. We use a four point scale, where 1 means that the products accounts for less than 5% of the HTSM US exports, 2 between 5 and 10%, 3 between 10 and 50% and 4 between 50 and 100% (column 7).

[49] As indicated before, Comtrade data are used to look at trade flows, which only capture the goods part of the top sector, not services related activities.

Table 6.4 Prioritisation of key barriers to NL-US trade and investment in the HTSM sector

No.	Broader theme	Barrier	Sub-sectors for which barriers is relevant	Effect of barrier	Priority for relevant Interviewees (H=high, M=medium, L= low)	Importance in NL-US HTSM goods exports (1=lowest, 4=highest)*
1	Customs	Transfer delays, slow custom procedures.	Cross-cutting	Delays and associated costs.	L	4
2	Government Procurement	Buy American Act / Government procurement.	Cross-cutting	Outright restrictions for suppliers; administrative burden for sub-contractors to US companies.	H	4
3	IPR issues	IPR protection.	Cross-cutting	Loss of (potential) market share and sales (revenue). Dutch IPR approach is very open-source, much different from the Americans. They claim IP rights very quickly, even on basis of just an email.	H	4
4	Health & safety standards	Health & safety measures.	Cross-cutting	Direct cost increases due to process / product adjustments. Administrative burden.	L	4
5		Federal Motor Vehicle Safety Standards; Roof Crush Resistance; Occupant Protection in Interior Impact, etc.	Automotives	Direct cost increases due to process / product adjustments. Administrative burden.	L	1
6	Import licensing	Import license.	Military and dual use products (see under No. 2)	Administrative burden and delays. Licenses are required and need to be arranged in the pre-contracting phase through US state departments;	M	4

No.	Broader theme	Barrier	Sub-sectors for which barriers is relevant	Effect of barrier	Priority for relevant Interviewees (H=high, M=medium, L= low)	Importance in NL-US HTSM goods exports (1=lowest, 4=highest)*
				procedure is unpredictable and can cost months.		
7		FCC technical specifications have to be met in order to get approval of the customs authority to import radio frequency devices.	Communication equipment (dual use products, see under No.2).	Administrative burden and compliance costs.	L	2
8	Restrictions and prohibitions to trade and investment on grounds of national security	International Traffic in Arms Regulations (ITAR).	Aerospace, aeronautics and military products; some dual use products (see next).	Administrative burden and associated cost. Very costly and very complex process. Large barrier to trade. EU and US have similar rules, but not harmonised. So US regulations do not always fit into Dutch and EU regulation. Compliance is difficult.	H	3
9		Dual-Use Export Controls[50].	The relevant dual use products / sectors, including: nucleaire goods; materials and materials processing, electronics, computers, telecommunications and information security goods, sensors and lasers, navigation and aviation electronics, maritime systems and vessels, aerospace and aeronautics.	Administrative burden and associated cost. Outright restrictions.	M	4

[50] 'dual-use items' includes software and technology, which can be used for both civil and military purposes, and concerns all goods which can be used for both non-explosive uses and assisting in any way in the manufacture of nuclear weapons or other nuclear explosive devices (COUNCIL REGULATION (EC) No 428/2009).

No.	Broader theme	Barrier	Sub-sectors for which barriers is relevant	Effect of barrier	Priority for relevant Interviewees (H=high, M=medium, L= low)	Importance in NL-US HTSM goods exports (1=lowest, 4=highest)*
10		Prohibitions (security, sensitive products, political) to trade and investments.	Idem above.	Idem above.	M	4
11		Prior authorisation for sensitive product categories.	Idem above.	Administrative burden.	L	4
12		Foreign Investment and National Security Act[51].	Telecommunications, energy technologies (NB this relates to investments only, not trade).	Administrative burden, long delays and possibly no market access at all.	L	N.R.
13	Rules of origin	Rules of origin; "EU origin" not accepted.	Cross-cutting (most relevant for products made from components from different EU MS).	Administrative burden.	L	#
14	State Aid and Subsidies	Very limited access of foreign companies to US government support programmes / State aid, incl. subsidies and tax benefits.	Cross-cutting for all high-tech (NB access to US support programmes only really relevant for investments).	Relative cost disadvantage.	M	4
15		US Support to Boeing.	Most relevant to aerospace and airplane builders, less to component suppliers (which all Dutch companies in this sector are).	Relative cost disadvantage.	L	2
16	Technical regulations, measures and standards	US product standards which differ from international standards.	Aerospace, automotives, electronics and electrical equipment, telecommunications.	FARs and DEFARs are regulations and administrative requirements not equivalent to EU	H	4

[51] Transactions that involve foreign governments, a threat to national security, or control of critical infrastructure must be subject to a 45-day formal investigation, except that exceptions are possible for foreign government transactions if the Secretary or Deputy Secretary of Treasury and the lead agency certify that there is no national security threat. Critical infrastructure includes energy assets and critical technologies.

No.	Broader theme	Barrier	Sub-sectors for which barriers is relevant	Effect of barrier	Priority for relevant Interviewees (H=high, M=medium, L= low)	Importance in NL-US HTSM goods exports (1=lowest, 4=highest)*
				standards. Very implicit requirements that are sometimes easier to fulfil for US companies. E.g. for automotive: US product standards (FMVSS) which differ from the international standards (UNECE).		
17	Technical regulations, measures and standards	Technical regulations and measures; differences in standards; Different technical regulations on products and means of production.	Communication, office equipment, machinery, electronics.	Direct cost increases due to process / product adjustments. Administrative burden.	M	4
18	Technical & safety standards and certification	Non-functioning of system for safety standards (Underwriters Laboratories) / malfunctioning of the US certification market.	Electronics, tele-communications and office equipment - component manufacturers in particular.	UL are sole authorised organisations for certification and control prices and processing, which is seen to lead to high costs and long processes.	M-H	3
19		Adjusting products to meet US certification requirements.	Electronics, component manufacturers.	Direct cost increases due to process / product adjustments.	L	3
20	Trade in services	Cumbersome procedures and long process to dispatch technical staff (maintenance engineers) for services in US.	Machinery, equipment and systems suppliers (installations).	Delays, cost increases / reputation damage.	L	#
21	Other	Differences in regulations between States within the	Cross-cutting.	Administrative burden and compliance costs.	L-M	4

No.	Broader theme	Barrier	Sub-sectors for which barriers is relevant	Effect of barrier	Priority for relevant Interviewees (H=high, M=medium, L= low)	Importance in NL-US HTSM goods exports (1=lowest, 4=highest)*
		US; US state level safety certifications.				
22		SME Act.	Cross-cutting.	Act that calls for the involvement of US SMEs into production. If you do not bargain this clause out, it will be in definitely and causes extra costs for trade.	L	4

* N.R. = Not relevant (e.g. because barrier relates to investments) # = Could not be determined, e.g. because it involves services trade or product characteristics not obvious from trade data (e.g. origin of content).

As many of the barriers affect large parts of the sector, there appear to be a large number of priorities. However, grouping them under main themes, the picture emerges of only a few real key barriers. The following barriers are the highest priorities and affect a large part of the sector's trade:

- Restrictions and prohibitions to trade and investment on grounds of national security (especially ITAR, followed by dual use export controls and prohibitions);
- Technical regulations, measures and standards including certification issues (US standards that differ from international standards, non-functioning of system for safety standards);
- Government procurement (Buy- American Act);
- IPR issues (first-to-invent principle).

With respect to restrictions and prohibitions to trade on grounds of national security, it is important to highlight that there are many products of dual use in the HTSM sector that are affected by these measures.

The issue of limited access to government procurement due to the Buy American Act is relatively important in this sector, as the government is an important buyer of HTSM products.

6.4 Conclusions on priority barriers: linking Dutch priorities to the EU negotiation position

In the previous section we identified the main Dutch priority barriers in the HTSM sector to address in a possible EU-US FTA. These are:

- Restrictions and prohibitions to trade and investment on grounds of national security (especially ITAR, followed by dual use export controls and prohibitions);
- Technical regulations, measures and standards including certification issues (US standards that differ from international standards, non-functioning of system for safety standards);
- Government procurement (Buy- American Act);
- IPR issues (first-to-invent principle).

Some considerations for effectively tackling the priority barriers

Some of the priority barriers will be more easy to tackle than others in an FTA. The chance to tackle the issue will depend on two main factors: 1) the support in the EU to get the issue high on the negotiating agenda; 2) the political will in the US to address the issue.

It goes beyond the scope of this study to make a detailed assessment of these factors, as this would require consultations also with players outside the Netherlands. Nevertheless, there are some things that we can say about it on the basis of existing studies and the interviews.

With respect to EU support to get the issue on the agenda, we observe that none of the barriers identified in Table 6.4 are only applicable to the Netherlands - other EU member states will also face these barriers when exporting to the US. The relevance of the barrier for other EU countries thus mainly depends on the economic importance of the products that are affected by the barrier. It should be noted that the stakeholder consultations revealed that the Dutch are relatively strong in complying to the US requirements, which gives them a competitive advantage over companies of other EU countries.

With respect to the political will, we note that prohibitions to trade and investment on grounds of national security have become an increasingly poignant issue since the events of September 11, 2001 ("9-11"). These barriers concern a highly sensitive issue (national security), and are therefore extremely hard to tackle as nations tend to place national security above all else. Also the

differences in dealing with intellectual property rights will be difficult to reconcile with the EU system. With respect to government procurement there is more scope for success, although in the current economic circumstances, it may also not be very easy to remove.

Linking the priority barriers to the FTA

In practice, it will be difficult to focus only on individual, very specific barriers. We therefore link the identified priority barriers to the likely elements of an FTA as formulated in the Interim Report of the High-Level Working Group to put them in a broader perspective. This is presented in the Table 6.5 below. Taking into account the above considerations on the possibility of effectively removing certain barriers, we put the barriers that seem to be more difficult in *italics*. As mentioned above, addressing the security-related barriers will be very difficult and would therefore involve more taking off the sharpest edges, finding ways to cooperate and exchange information in a timely manner, rather than eliminating them altogether. However, a great number of the HTSM sector's products can be categorised as dual use products and thus are faced with these barriers. So trying to at least reduce the barriers as much as possible is important for the Dutch HTSM sector as it would reduce compliance cost. If the US would request a security exception, it would be important to limit the scope of this exception, especially for these dual use products.

While some of the other barriers listed in table 6.4 could be included in table 6.5 as well, we have opted to only present the top priority barriers so as to ensure focus. It is nevertheless good to be aware of the long list of barriers as presented in table 6.4, when the broader issues are discussed in EU context.

Table 6.5 Linking Dutch priorities to the EU-US trade negotiations agenda

No	FTA element	Dutch priorities
	Tariffs	
	SPS plus chapter	
	TBT plus chapter	
	Horizontal disciplines on regulatory coherence and transparency	Certification system. *Harmonisation, mutual recognition* and transparency improvement of system for control of trade and investments in sensitive goods and services (including licensing).
	Specific agreements on regulatory compatibility for specific sector	Dual use products & export controls; Harmonisation / mutual recognition of technical standards.
	Services	
	Investment	Improve transparency of process of approval.
	Procurement	Increase access to US government contracts.
	Intellectual Property	*Harmonisation and transparency improvement of system.*
	Rules	

7 Identification and prioritisation of trade barriers in the Chemicals sector

7.1 About the Chemical sector

7.1.1 Introduction

The Chemicals sector consists of companies that focus on the production of organic and inorganic chemicals as well as fuels and pharmaceuticals. According to the cluster specification of Dialogic (2011)[52] the sector is made up of four parts, including:

1. Chemical products;
2. Rubber and plastic products;
3. Refinement of petroleum;
4. Medical/pharmaceutical R&D.

The chemicals sector is a traditionally strong export sector. It provides 63,000 jobs (excluding pharmaceuticals) [53] and is characterised by close collaboration between large MNEs such as Akzo Nobel, DSM, Shell and Royal ten Cate, and SMEs, which play a vital role in the sector's innovation.[54] Another source of innovation in the Chemicals sector is the "Golden Triangle." This link between the government, knowledge institutes and the private sector has resulted in a multitude of long-lasting public-private partnerships.[55]

To better focus its efforts to stimulate the diverse sector, the top sector team has divided the sector into four different "Top Consortia for Knowledge and Innovation" (TKIs): (1) Smart Polymeric Materials, (2) Process technology, (3) Bio-based Economy and (4) Nursery for New Chemical Innovations. These TKIs cover the entire chain, from scientific research to valorisation. Like the HTSM sector, Chemicals also wishes to pursue the Holland branding strategy.[56] It also has a clear focus on durability/sustainability in its strategy, reflected in the emphasis on the bio-based fuels and increasing yields of chemical processes.[57]

7.1.2 Trade and Investment relations between the Netherlands and the US in the sector

According to the industry association VNCI the value of exports of the chemicals sector (including pharmaceuticals) equalled 71 billion Euros in 2011, or 17.5% of total Dutch exports, 8% of which was destined for the United States.

According to data for 2011 from De Nederlandse Bank,[58] the US has approximately €11.4 billion (FDI stocks) invested in the Dutch Chemicals sector, whereas the Netherlands has a little over €19.5 billion (FDI stocks) invested in the American Chemicals sector. In 2010, "the Netherlands and the United Kingdom accounted for the bulk of foreign investments in the U.S. petroleum sector."[59]

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52 Dialogic (2011) "Nederlandse clusters in kaart".
53 VNCI website, http://www.vnci.nl/feiten/chemie-in-nederland.aspx last checked 3-9-2012.
54 Adviesrapport Chemie.
55 Adviesrapport Chemie.
56 Agenda Internationalisering Topsector Chemie – maart 2012.
57 Adviesrapport.
58 http://www.statistics.dnb.nl/index.cgi?lang=nl&todo=Balans Table 12.6.1 / 12.6.2.
59 Foreign Direct Investment in the United States: An Economic Analysis - James K. Jackson, May 10 2012.

The role of FDI is also reflected in the trade flows. According to a joint statement of the American Chemistry Council (ACC) and the European Chemical Industry Council, Cefic,[60] some 35 to 40 percent of total EU-US bilateral trade flows of chemicals concern intra-company trade.

7.2 Identification of trade barriers

We identified the relevant barriers for the sector on the basis of the following sources: 1) the market access database (MADB) of the EU; 2) the Ecorys EU-US NTM study; 3) other literature; and 4) interviews with stakeholders in the sector. All relevant information of the first two sources is included in Annex D.

7.2.1 Tariff barriers

Overall tariffs between the EU and US are generally low. This has been agreed in Chemical Tariff Harmonisation Agreement (CTHA), which has been signed by some 50 WTO members including the EU and US. The CTHA provides for the reduction of chemicals tariffs to 0%, 5.5% or 6.5% of the Harmonised System Chapters 28 to 39 and includes inorganic and organic chemicals, fertilisers and plant protection chemicals, soaps and cosmetics, other chemicals and plastics. Wen looking at the tariff, we take the Ad Valorem Equivalents (AVE).[61] The weighted average tariff[62] for the Chemicals sector amounts to 1.5 percent. The top tariff (AVE) for the sector is 6.5 percent, applied to some 30 products (HS6 level). Table 5.1 indicates the products that pay the highest tariffs in absolute terms.

Table 7.1 Chemicals: Top 10 absolute tariffs paid per product group (HS6) weighted average 6.5%

Nr.	Product	AVE[63]	AVE * Trade value, US dollars
1	Prepared additives for mineral oils or for other similar liquids, nes.	6.5%	2,238,022
2	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles.	6.5%	1,447,300
3	Orthophthalic acid esters, nes.	6.5%	1,094,700
4	Carboxylic acids with additional oxygen function and their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives.	6.5%	747,185.70
5	Polymers of propylene or of other olefins, in primary forms.	6.5%	729,426.30
6	Polytetrafluoroethylene, in primary forms.	6.5%	700,287.20
7	Polymers of styrene nes, in primary forms.	6.5%	487,606.10

[60] Joint ACC-Cefic Statement on European Commission public consultation on EU-US High-Level Working Group on jobs and growth, 23 April 2012.

[61] For the definition of AVEs by the International Trade Center see: http://www.trademap.org/stGlossary.aspx; http://www.macmap.org/SupportMaterials/Methodology.aspx.

[62] Calculated using data on HS6 level from the following:
Tariff data: Data source: ITC tariff data (MAcMap); year 2011; AVE estimation methodology: AVE World Tariff Profile;
Trade data: Data source: Comtrade; year 2010; valuation: in Dollars, FOB; Query [reporter: 528; partner; 842; period: 2010; classification: as reported];
Tariff paid HS6 = trade value HS6 * AVE HS6;
Weighted average(sector) = sum (all tariffs paid in the sector)/sum(all value of trade in sector).

[63] AVE based on World Tariff Profile.

Nr.	Product	AVE[63]	AVE * Trade value, US dollars
8	Organo-sulphur compounds, nes.	6.5%	325,099.50
9	Dinonyl or didecyl orthophthalates.	6.5%	305,184.90
10	Polyethylene terephthalate, in primary forms.	6.5%	289,408.30

7.2.2 *Non-tariff barriers*

As for most products, tariffs are already relatively low for Chemical products and non tariff measures (NTMs) have become relatively more important for the sector. The following table provides an overview of the relevant non tariff measures identified in this study, divided into sector-specific and cross-cutting (horizontal) barriers. It should be noted that these barriers come from different sources (as indicated in the last column) and that there is some overlap between them. We have only removed the most obvious duplications, or the ones for which we have information that they are no longer relevant. It is striking that the EC's MADB has no sector-specific barriers for the chemical exports to the US, suggesting that these barriers are relatively low. Also the limited number of interviews revealed no major sector-specific barriers. In comparison to the other two top-sectors, there is relatively more focus on investment barriers, probably as many of the players in the sector are multinational companies with branches in the US.

Table 7.2 Identified barriers for the Chemicals sector

Nr.	Barrier	Source
Sector-specific barriers		
1	Classification and labelling requirements for chemical products	Ecorys NTM study
2	Different local governments (below state level) implementing chemical security regulations	Ecorys NTM study
3	Different state level chemical security regulations	Ecorys NTM study
4	Double certification need caused by the European Union's Authorised Economic Operator program and the US Customs-Trade Partnership against terrorism	Ecorys NTM study
5	Drug precursor legislation	Ecorys NTM study
6	Evaluation and notification of new significant new uses	Ecorys NTM study
7	FDA New Drug Approval Process	Ecorys NTM study
8	Indirect effects from food safety legislation – packaging in contact with food	Ecorys NTM study
9	Pesticide/biocide testing and evaluation for licensing	Ecorys NTM study
10	Prior authorization for sensitive product categories	Ecorys NTM study
11	Restrictions or bans on use of specific chemicals	Ecorys NTM study
12	Threat of 100% container scanning	Ecorys NTM study
13	US state level safety certifications requirements	Ecorys NTM study
14	Foreign Investment and National Security Act (FINSA), which can create excess costs for FDI	Ecorys NTM study
15	Long/difficult authorisation and registration procedures	Ecorys NTM study
16	Very limited access of foreign companies to US government subsidy programmes (e.g. Technology Innovation Programme)	Ecorys NTM study
17	Foreign Investment and National Security Act (FINSA), which can create excess costs for FDI	Ecorys NTM study
18	Long/difficult authorisation and registration procedures	Ecorys NTM study
19	Very limited access of foreign companies to US government subsidy programmes (e.g. Technology Innovation Programme)	Ecorys NTM study

Nr.	Barrier	Source
Horizontal barriers		
20	Classification and labelling differences between the EU and US	Ecorys NTM study
21	Diverging regulations in EU and US patent systems	Ecorys NTM study
22	Diverging technical standards	Ecorys NTM study
23	Environmental regulations (e.g. EU Emission Trading Scheme)	Ecorys NTM study
24	Intellectual property rights differences between the EU and US	Ecorys NTM study
25	Restrictions in Government procurement (e.g. the Buy American Act, ARRA and SBA)	Ecorys NTM study
26	Anti-dumping measures: practice of zeroing	MADB
27	Berry Amendment to the 1941 Defence Appropriations Act	MADB
28	Byrd Amendment (Continued Dumping and Subsidy Offset Act)	MADB
29	Container Security Initiative (CSI)	MADB
30	FDI limitations imposed by the CFIUS / FINSA framework	MADB
31	Helms-Burton Act	MADB
32	Hormones Dispute (Continued Suspension of Obligations)	MADB
33	Iran Non-Proliferation Act	MADB
34	Iran-Libya Sanctions Act and Iran Freedom Support Act	MADB
35	Lacey Act - Scope and implementation of the US legislation to combat illegal logging	MADB
36	Memoranda of Understanding (Defence Acquisitions)	MADB
37	Principle of First-to-Invent	MADB
38	Procurement: Buy American Act	MADB
39	Section 407 of the Trade and Development Act (Carousel Law)	MADB
40	Small Business Act	MADB
41	U.S. Customs Refusal of EU Origin ("Made in EU")	MADB
42	US Dual-Use Export Controls	MADB

7.3 Prioritisation of trade barriers

The list of barriers that are potentially important for the Chemicals Sector is very long. In order to get an idea of which barriers or areas of negotiations to focus on, we have carried out a prioritisation exercise the results of which are presented in Table 7.3 below (please note that this table is ranked alphabetically by broader area, not in order of priority). This exercise includes the following steps:

1. We have only included those barriers in the list that are mentioned as important by at least one of the interviewees (column 3);[64]
2. To account for the fact that we have not been able to speak to all relevant stakeholders, we have also included the barriers of the Ecorys EU-US NTM study which were considered the most pressing barriers in by the companies that participated in the business survey for this study (column 3);
3. For these barriers that are included in the table, we indicated the priority, based on the NTM business survey and the interviewees. We use a three point-scale for this, *High (H)* = listed by more than one source AND indicated as priority for at least one source, OR indicated at least once as top priority (ranked first); *Medium (M)* = listed by more than one source OR indicated as priority by one source; *Low (L)* = listed by one source but not as priority (column 6);

[64] Also the earlier mentioned joint statement of ACC and Cefic was used for this.

4. As the barriers are often not relevant for the entire sector, but only for a number of specific products, we indicate for which part of the top sector the barrier is relevant (column 4);
5. We also looked at the relative importance of these products in total Dutch exports of the Chemicals top sector to the US.[65] We use a four point scale, where 1 means that the product accounts for less than 5 percent of the Chemicals exports, 2 between 5 and 10%, 3 between 10 and 50% and 4 between 50 and 100% (column 7).

[65] As before, Comtrade data are used to look at trade flows, which only capture the goods part of the top sector, not.

Table 7.3 Prioritisation of barriers

No	Broader area	Barrier	Subsectors for which the barrier is relevant	Effect of the barrier	Priority for relevant Interviewees (H=high, M=medium, L= low)	Importance product in NL-US trade (1 = lowest, 4 = highest)
1	Customs and border measures	Customs valuation.	Various products.	Some products may be categorised as a different product facing higher tariff barriers.	M	#*
2		Slow custom procedures.	Cross-cutting.	Longer waiting times, significant impact for perishable products.	L	4
3		Tariffs.	All goods for which there are still tariffs.	Direct cost-increasing effect, but also EU tariffs increase costs for Dutch firms in the US that export from the US to NL. High EU tariffs on bio-ethanol have been mentioned specifically in relation to barrier no. 9).	H	3-4
4		Sugar quota.	All good which use sugar as ingredient.	The quota limit the amount of sugar available to chemical producers and/or increase prices of these inputs.	M	#*
5	Health and Safety standards	Some differences in standards.	Cross-cutting.	Direct cost increases due to process / product adjustments. Administrative burden.	L	2-3
6		Laws and regulations with respect to nutritional chemicals.	Nutritional chemicals.	Especially throughput times for approval are long.	M	1-2
7		Restrictions on use of certain chemicals.	Not specified.	Limits market access for certain products.	H	1-2
8	IPR	Lack of IPR protection with respect to cross border data.	Cross-cutting.	Possible loss of trade secrets to competitors, hence loosing the possibility to reap benefits of R&D investments.	M	#*
9	State aid	US subsidies for bio ethanol.	Bio ethanol.	Gives US chemical producers an advantage as bio-ethanol may become important input for the chemical industry.	H	1
10	Technical regulations, standards and certification	Differences in regulatory systems, lack of transparency.	Cross-cutting.	Direct cost increases due to process / product adjustments. Administrative burden and uncertainty.	M	4

Note: * # means that it is impossible to look at the importance for trade flows based on trade statistics or a realistic estimation.

As can be seen from the table, most barriers for the chemicals sector relate to the two broader areas of customs and border measures, and health and safety standards. In addition, it can be observed that stakeholders have also pointed to an unequal playing field between the EU and the US due to EU policies, like the high sugar prices (sugar is an important input for the chemical industry) due to especially sugar import quota and the relatively more strict rules in the EU for state aid compared to the US.

The only barrier that is considered a priority and that affects a large part of the sector concerns tariffs. Although tariffs are not very high, given the large intra-company trade share in total bilateral trade flows between the two partners, this is still an important concern to the industry. An overall reduction or elimination of tariffs would also reduce the problem of customs valuation (although this is not listed as a priority barrier and only affects a much smaller part of the sector).

Then there is a group of barriers that are considered a high priority, but affect a much smaller part of the current trade. We consider it important to take these into account as well, because the current trade flows are partly determined by the height of the barriers (the so-called endogeneity problem). This is relevant for the US bio-ethanol subsidies which may give US chemical producers an advantage, and the restrictions on use of certain chemicals.

7.4 Conclusions on priority barriers

In the previous section we identified the main Dutch priority barriers in the Chemicals sector to address in a possible EU-US FTA. These are:

- reduction/removal of tariffs;
- restrictions on the use of certain chemicals;
- US bio-ethanol subsidies.

With respect to the latter the industry does not want to tackle this in an FTA, as the sector benefits from these subsidies, which have a price-reducing effect on inputs for the chemical industry.[66] We will therefore not take it into account as priority barrier for the FTA negotiations.

Some considerations for effectively tackling the priority barriers

Some of the priority barriers will be more easy to tackle than others in an FTA. The chance to tackle the issue will depend on two main factors: 1) the support in the EU to get the issue high on the negotiating agenda; 2) the political will in the US to address the issue.

It goes beyond the scope of this study to make a detailed assessment of these factors, as this would require consultations also with players outside the Netherlands. Nevertheless, there are some things that we can say about it on the basis of existing studies and the interviews.

With respect to EU support to get the issue on the agenda, we observe that none of the barriers identified in Table 7.3 are only applicable to the Netherlands – other EU member states will also face these barriers when exporting to the US. The relevance of the barrier for other EU countries thus mainly depends on the economic importance of the products that are affected by the barrier. Based on the analysis for this study, there are no clear barriers or products for which the NL interests appear substantially different than the EU interests.

[66] Although the subsidy is thus positive for the chemicals sector, the input for the negotiations should balance it with possible effects for the bio-ethanol sector in the Netherlands.

With respect to the political will, it is good to mention that the EU and US chemical industries share some important objectives with respect to an FTA as witnessed by the fact that the associations for the chemical industry on both sides of the Atlantic have published a joint statement with their priorities for the negotiations. This may be partly explained by the large share of intra-company trade in the sector.

On the basis of this information, there are no priority barriers that would à priori be unrealistic to tackle.

Link between the priority barriers and the FTA

In practice, it will be difficult to focus only on individual barriers. We therefore link the identified priority barriers to the likely elements of an FTA as formulated in the Interim Report of the High-Level Working Group to put them in a broader perspective. This is presented in Table 7.4 below. This table only includes the priority barriers to ensure focus. It is nevertheless good to be aware of the other relevant barriers listed in Table 7.3, when the broader issues are discussed in EU context.

Especially technical and health and safety requirements are important for the chemical sector, and mutual recognition or equivalence of measures would greatly benefit the sector. It is clear that the health and safety or technical requirements are in itself not difficult to meet, (EU standards are often higher or at least equivalent), but the differences in specific regulations or proving that the requirements are met constitute a burden for the sector. This is to a lesser extent also relevant for customs procedures.

Table 7.4 Linking Dutch priority barriers for Chemicals to FTA elements

No	FTA element	Dutch priorities
1	Tariffs	Reduce/eliminate remaining import duties
2	SPS plus chapter	
3	TBT plus chapter	
4	Horizontal disciplines on regulatory coherence and transparency	
5	Specific agreements on regulatory compatibility for specific sector	Restrictions on use of certain chemicals
6	Services	
7	Investment	
8	Procurement	
9	Intellectual Property	
10	Rules	

8 Policy recommendations

This study has first assessed the expected impact of an EU-US FTA for the Netherlands. All sources consulted clearly indicate that a potential EU-US FTA would yield positive results in terms of welfare in all three country-blocs (EU, US and NL). For the Netherlands the yearly change in national income is estimated to be in the range of 1.4 to 4 billion Euros in the long run, depending on the model used and liberalisation scenario assumed as explained in chapter 3. Trade is also expected to be impacted positively by such an agreement. The results of the study therefore confirm the economic incentive to enter into negotiations for an EU-US FTA for the Netherlands.

On the basis of a number of selection criteria, three top sectors were selected for more detailed analysis and prioritisation of the prevailing trade barriers: Agrofood & Horticulture(AF&H), High tech systems and materials (HTSM), and Chemicals. Although it is clear that all of these sectors have their own specificities and therefore their own relevant trade barriers, there are also a number of common characteristics with respect to the trade barriers.

What has become clear from the interviews and desk study is that the differences in regulations and standards (whether they relate to health and safety or technical measures) pose a major burden to Dutch exporters. The problem is usually not that the standards are difficult to meet (many indicate that EU standards are even higher or at least equal), but that there are differences between EU and US standards, which cause additional costs and prevent economies of scale, and/or that efforts are needed to prove compliance with the US standards and requirements. The lack of transparency on the requirements itself (e.g. the quarantaine list relevant for a.o. plant propogation material) or the process to get approval for certain exports or investment to the US (Product Risk Assessments, licenses for certain chemicals) also causes uncertainty and extra costs for Dutch companies.

It should be stressed that many of the barriers have a long history and/or are part of the culture in the US, and they are unlikely to be eliminated completely. Rather, the goal should be to increase transparency, simplify procedures and reduce the time needed for approval processes, etc. In this respect, it should be noted that the issue of newly arising or potential future barriers may be more pertinent. These may be easier to address if done so in a timely manner.

In addition to these NTMs, tariffs are also identified as priority barriers for AF&H and Chemicals sectors. Although in general they are already low, for some specific products they can be higher and especially in subsectors where margins are small, tariff elimination can still be important. For the Chemicals sector the issue is especially important from the perspective of intra-company trade.

Before going into the sector-specific recommendations we note that while the EU-US negotiations form an important platform for addressing the existing and potential trade barriers, other forms of trade diplomacy should be practiced in parallel to these negotiations. Such trade diplomacy should particularly involve local stakeholders (EU and Dutch industry associations, Netherlands Embassy, EU Delegation, locally operative companies, etc.), as they tend to have a better insight into behind the border issues, particularly as regards potential new barriers.

In this regard, and given that this study has focused on stakeholder in the Netherlands, it would also be worthwhile to consult relevant US stakeholders, to get a better understanding of the areas where progress could be made.

Sector-specific barriers

Next to the barriers mentioned above, we identified other barriers that are more sector-specific or considered less of a general priority. The following comments can be made for the three sectors.

For **Agrofood and horticulture (AF&H)**, most barriers relate to the broader areas of customs and border measures (tariffs) and health & safety requirements. The latter primarily relate to SPS measures which clearly constitute the main non-tariff barrier for trade with the US.[67] Mutual recognition or harmonisation of standards would therefore help to increase market access to the US. However, this will not be easy to achieve. Some barriers, like the ban on beef due to BSE, are unlikely to be removed, also given the EU measures in the sector. It will be important to be aware of the EU barriers to US products in order to assess what could be offered to the US in return for removing certain barriers. Although this applies to all sectors, it is especially relevant for the AF&H sector, given the support and protection this sector gets in the EU (notably through the Common Agricultural Policy).

For **High Tech Systems & Materials (HTSM)**, a large part of the relevant barriers (including restrictions and prohibitions) are taken on the grounds of national security. As there are many dual use products in the sector, these barriers have a significant effect. It will be very difficult if not impossible to remove these barriers, rather the focus should be on facilitating procedures, and increasing transparency and exchange of information. For a number of products in the sector, US standards also differ from EU or even international standards. Also here it would be good to come to harmonisation or mutual recognition of standards. Increase in access to the market for government procurement is also relevant for the HTSM sector.

For **Chemicals**, next to tariffs, technical and health and safety requirements are important, and mutual recognition or equivalence of measures would greatly benefit the sector. It is also worth mentioning that stakeholders have pointed to an unequal playing field between the EU and the US due to EU policies, like the sugar quota which drive up sugar prices (sugar is an important input for the chemical industry) and the relatively more strict rules in the EU for state aid compared to the US.

The top priority elements for the three top sectors as explained in the respective chapters (5-7) and their links to the elements for negotiations according the High-Level Working Group Interim Report are summarised in the table below. It should be noted that there are other relevant barriers that could be solved through an FTA, but this table only contains the top priorities in order to ensure focus. The ones that will be extremely difficult to tackle are presented in *Italics*.

Table 7.5 Linking Dutch priority barriers for the selected top sectors to FTA elements

FTA element	Dutch priorities
Tariffs	Reduce/eliminate remaining import duties (AF&H, Chemicals), especially in subsectors where they matter most (highest tariffs and/or small margins) (AF&H).
SPS plus chapter	Overall: Harmonisation / mutual recognition of technical standards. Specific: • Dairy Grade A (AF&H); • *Ban on beef (BSE) (AF&H).*
TBT plus chapter	
Horizontal disciplines on regulatory coherence and transparency	• Certification system (HTMS); • Harmonisation, mutual recognition and transparency (HTMS); • Improvement of system for control of trade and investments in sensitive

[67] Differences in EU-US SPS measures are not given the highest priority, but medium priority, which can be explained by the fact that that there are also other, more specific SPS related barriers included in the table.

FTA element	Dutch priorities
	goods and services (including licensing) (HTMS); • *Differences in regulations between States (AF&H).*
Specific agreements on regulatory compatibility for specific sector	• Dual use products & export controls (HTMS); • Restrictions on use of certain chemicals (Chemicals); • Harmonisation / mutual recognition of technical standards (HTMS).
Services	
Investment	Improve transparency of process of approval (HTMS).
Procurement	Increase access to US government contracts (HTMS).
Intellectual Property	*Harmonisation and transparency improvement of system (HTMS).*
Rules	• Custom & border procedures (AF&H); • Import licenses (AF&H, HTSM).

It should be noted that these are important barriers with or without an FTA. For a number of issues, there are already initiatives to reduce some of these barrier for EU and Dutch companies (e.g. in the TransAtlantic Economic Council (TEC)) and it is important to support these initiatives next to the possible FTA negotiations.

Annex A – Detailed CGE results

A.1 CGE results from Ecorys (2009) "The impact of FTAs in the OECD"

The tables below present the CGE modelling results of the impact of an EU – US FTA. The indicators that are used in the study include changes in output, changes in exports, changes in producer prices, changes in skilled labour employment and changes in unskilled labour employment.

Table A.1 Output effects of EU-US FTA on all industries, % change

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
1	Chemicals, rubber, and plastics	0.0	0.2	0.0	0.2	0.0	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
2	Other machinery and equipment	-0.5	0.1	0.4	0.7	-1.3	-1.1	0.5	0.5	0.0	0.1	0.0	0.0	0.0	-0.2
3	Petro-chemicals	1.6	1.7	0.4	0.5	-0.3	-0.2	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
4	Electrical machinery and equipment	-2.1	-0.1	-2.4	-1.3	4.8	6.3	0.4	0.5	-0.5	0.0	-0.3	-0.7	-0.6	-0.7
5	Processed foods, n.e.c.	-0.3	-0.1	0.0	0.2	0.2	0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
6	Iron and steel	4.2	5.6	-0.1	0.2	-1.1	-0.8	-0.1	-0.1	0.2	0.3	0.1	0.0	0.1	-0.1
7	Motor vehicles	-4.0	-2.9	0.9	1.2	0.9	1.2	-2.0	-2.2	1.2	1.4	0.2	0.1	-1.0	-1.3
8	Crops, n.e.c. (except grains)	-1.3	-1.3	-1.5	-1.5	3.3	3.4	0.1	0.0	-0.4	-0.4	-0.2	-0.1	-0.2	-0.2
9	Vegetables and fruits	1.2	1.1	-0.1	-0.1	-0.2	-0.3	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
10	Fabricated metals	0.3	0.7	0.1	0.4	-0.4	-0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.1
11	Beverages and tobacco	1.7	2.1	0.1	0.2	-0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.1
12	Non-ferrous metals	-0.2	0.2	-0.4	-0.1	0.4	0.6	0.0	0.0	-0.2	-0.2	0.0	0.0	0.0	0.0
13	Vegetables oils	0.5	0.7	0.1	0.3	-0.6	-0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
14	Paper, pulp, and publishing	0.2	0.4	-0.1	0.2	-0.2	-0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.2	0.2
15	Textiles	0.7	1.1	0.8	1.1	0.0	0.1	0.4	0.3	-0.4	-0.5	-0.2	-0.1	-0.2	-0.4
16	Dairy products	2.2	2.5	1.5	1.6	-3.7	-3.6	0.1	0.0	-0.2	-0.2	0.0	0.0	0.0	0.0
17	Manufactures, n.e.c.	-0.6	-0.6	0.3	0.6	0.2	0.1	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
18	Meats, except beef	-2.6	-2.4	-3.9	-3.8	4.0	4.0	0.2	0.2	-0.1	-0.1	0.1	0.1	0.2	0.2
19	Other transport equipment	-4.1	-3.6	-3.5	-3.1	3.2	3.3	-0.2	-0.1	0.2	0.2	0.1	0.1	-0.7	-0.9
20	Clothing	-0.2	0.2	-0.2	0.1	17.5	16.7	0.2	0.1	-0.2	-0.3	-0.4	-0.3	-0.1	-0.3

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
21	Oil, gas, and coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Wood products	0.1	0.4	0.1	0.4	-0.5	-0.3	0.2	0.2	0.0	0.0	0.2	0.2	0.3	0.3
23	Other goods	0.1	0.3	0.1	0.2	-0.7	-0.6	0.1	0.0	-0.1	-0.1	0.1	0.1	0.1	0.0
24	Utilities	0.1	0.4	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
25	Construction	0.0	0.5	0.0	0.4	0.1	0.3	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
26	Retail and wholesale trade and warehousing	-0.1	0.2	0.0	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
27	Transport services	0.6	0.7	0.1	0.3	0.0	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.2	0.2
28	Communications	0.0	0.3	-0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
29	Other financial services	0.1	0.4	0.3	0.5	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
30	Insurance	0.1	0.3	1.6	1.7	-1.5	-1.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
31	Other business services	0.1	0.4	-0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1
32	Recreational and consumer services	0.0	0.4	-0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
33	Other services (public health, education, residential)	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1

Table A.2 Export Effects of an EU-US FTA on all Industries, % change

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
1	Chemicals, rubber, and plastics	1.4	1.6	1.3	1.5	7.5	7.6	-0.3	-0.3	-0.6	-0.6	-0.5	-0.5	-0.5	-0.5
2	Other machinery and equipment	1.0	1.7	2.1	2.4	4.4	4.6	0.6	0.6	-0.4	-0.3	-0.1	-0.1	-0.2	-0.4
3	Petro-chemicals	2.9	3.1	2.6	2.7	3.0	3.1	-0.2	-0.2	-0.1	-0.1	-0.2	-0.1	-0.2	-0.2
4	Electrical machinery and equipment	-2.0	-0.1	-1.9	-0.8	9.5	11.1	0.6	0.7	-0.8	-0.4	-0.6	-1.1	-0.7	-0.7
5	Processed foods, n.e.c.	1.0	1.2	1.3	1.4	9.4	9.4	0.1	0.0	-0.2	-0.3	-0.1	0.0	0.0	-0.1
6	Iron and steel	4.8	6.1	0.2	0.5	-0.4	-0.2	-0.1	0.0	-0.1	0.1	0.1	0.2	0.2	0.0
7	Motor vehicles	-4.4	-3.3	2.1	2.5	8.3	8.6	-3.7	-4.1	1.1	1.2	0.2	0.2	-1.8	-2.1
8	Crops, n.e.c. (except grains)	2.7	2.6	7.5	7.3	53.7	53.9	-1.3	-1.3	-1.3	-1.3	-1.3	-1.2	-1.5	-1.4
9	Vegetables and fruits	0.9	0.9	-0.1	-0.1	0.6	0.5	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
10	Fabricated metals	1.6	1.9	1.9	2.1	5.8	5.7	0.5	0.6	-0.1	0.1	0.4	0.6	0.4	0.5
11	Beverages and tobacco	2.3	2.7	0.9	1.0	7.0	7.0	-0.1	-0.1	-0.3	-0.4	-0.1	-0.2	-0.2	-0.2
12	Non-ferrous metals	0.0	0.3	0.6	0.9	7.5	7.5	0.1	0.1	-0.4	-0.4	-0.2	-0.1	-0.1	-0.1
13	Vegetables oils	0.8	0.9	1.5	1.6	2.3	2.2	-0.6	-0.5	-0.3	-0.3	0.0	0.1	-0.1	-0.1
14	Paper, pulp, and publishing	0.8	0.9	0.3	0.5	1.0	1.0	0.4	0.4	0.0	0.0	0.5	0.5	0.4	0.5
15	Textiles	2.6	3.1	2.7	3.0	6.2	6.2	0.4	0.3	-0.8	-0.8	-0.4	-0.2	-0.4	-0.6
16	Dairy products	6.3	6.5	11.4	11.5	45.2	45.3	*	*	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4
17	Manufactures, n.e.c.	0.5	0.2	4.1	4.5	9.5	9.3	0.0	0.0	-0.6	-0.6	-0.5	-0.4	-0.6	-0.7
18	Meats, except beef	-2.7	-2.5	-2.9	-2.8	35.8	35.5	-1.8	-1.8	-1.4	-1.4	-0.4	-0.3	0.0	0.0
19	Other transport equipment	-3.2	-2.7	-1.7	-1.3	12.5	12.5	-0.6	-0.4	-0.8	-0.6	-0.4	-0.3	-1.5	-1.5
20	Clothing	0.5	0.9	1.0	1.3	32.3	31.4	0.5	0.4	-0.4	-0.4	-0.7	-0.6	0.1	-0.2
21	Oil, gas, and coal	-0.3	-0.2	3.7	3.7	5.3	5.3	*	*	-0.1	0.0	0.1	0.4	-0.1	0.0
22	Wood products	0.9	1.1	1.0	1.2	2.5	2.4	0.4	0.5	-0.1	-0.1	0.4	0.7	0.4	0.6
23	Other goods	0.8	0.9	1.3	1.3	1.4	1.3	0.1	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
24	Utilities	0.3	0.6	-0.3	-0.1	-1.0	-0.8	0.4	0.4	0.1	0.1	0.5	0.4	0.3	0.3
25	Construction	0.3	0.4	-0.1	0.0	1.1	1.0	0.3	0.4	-0.2	-0.2	0.2	0.4	0.2	0.3
26	Retail and wholesale trade and warehousing	0.2	0.3	0.0	0.1	1.5	1.5	0.4	0.5	0.1	0.1	0.4	0.5	0.3	0.3
27	Transport services	0.8	0.9	0.6	0.7	1.3	1.3	0.7	0.7	0.2	0.3	0.5	0.6	0.5	0.6
28	Communications	0.4	0.6	0.3	0.4	7.1	7.3	0.4	0.4	0.1	0.1	0.5	0.5	0.5	0.5
29	Other financial services	2.5	2.5	5.8	5.9	10.1	10.1	0.5	0.7	0.1	0.2	0.3	0.5	0.4	0.5

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
30	Insurance	1.6	1.7	7.5	7.6	2.8	2.7	-0.1	0.0	-0.6	-0.5	-0.1	0.0	-0.4	-0.3
31	Other business services	0.8	0.9	0.5	0.7	7.6	7.4	0.6	0.6	0.1	0.2	0.4	0.5	0.4	0.4
32	Recreational and consumer services	0.4	0.6	0.0	0.1	1.7	1.7	0.4	0.3	0.1	0.1	0.3	0.4	0.3	0.4
33	Other services (public health, education, residential)	0.3	0.2	-0.3	-0.4	-0.9	-0.9	0.6	0.6	0.1	0.2	0.5	0.6	0.5	0.6

Table A.3 Producer Price Effects of an EU-US FTA on all Industries, % change

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
1	Chemicals, rubber, and plastics	-0.2	-0.2	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
2	Other machinery and equipment	0.0	-0.1	0.0	0.0	0.3	0.3	-0.2	-0.2	0.0	0.0	-0.1	-0.1	-0.1	0.0
3	Petro-chemicals	-0.2	-0.2	-0.1	0.0	-0.1	-0.1	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0
4	Electrical machinery and equipment	0.2	0.0	0.3	0.2	-0.5	-0.7	-0.2	-0.2	0.0	0.0	0.0	0.1	0.0	0.0
5	Processed foods, n.e.c.	-0.1	-0.2	0.0	0.0	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
6	Iron and steel	-0.9	-1.2	0.1	0.0	0.3	0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
7	Motor vehicles	0.8	0.6	-0.2	-0.3	-0.1	-0.2	0.4	0.5	-0.3	-0.3	-0.1	-0.1	0.2	0.3
8	Crops, n.e.c. (except grains)	-1.0	-0.9	-0.5	-0.5	1.6	1.7	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
9	Vegetables and fruits	-0.5	-0.5	-0.2	-0.1	0.4	0.4	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
10	Fabricated metals	-0.1	-0.1	0.1	0.1	0.2	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
11	Beverages and tobacco	-1.6	-1.9	-0.1	-0.2	0.2	0.2	-0.1	-0.1	0.0	0.1	-0.1	-0.1	-0.1	0.0
12	Non-ferrous metals	-0.1	0.0	0.0	0.0	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
13	Vegetables oils	-0.1	-0.1	0.0	0.1	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
14	Paper, pulp, and publishing	0.0	0.0	0.1	0.1	0.2	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
15	Textiles	-0.2	-0.3	-0.1	-0.1	0.1	0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.1	-0.1	0.0
16	Dairy products	-0.1	-0.1	0.1	0.1	-0.2	-0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
17	Manufactures, n.e.c.	0.0	0.1	0.0	0.0	0.1	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0
18	Meats, except beef	-0.2	-0.2	0.0	0.0	0.3	0.3	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
19	Other transport equipment	0.4	0.4	0.4	0.4	-0.2	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.1
20	Clothing	0.0	0.0	0.1	0.1	-2.0	-1.9	-0.2	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0
21	Oil, gas, and coal	0.0	0.1	0.1	0.2	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0
22	Wood products	0.0	0.0	0.1	0.1	0.1	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
23	Other goods	-0.2	-0.1	0.0	0.1	0.1	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
24	Utilities	0.0	-0.1	0.1	0.1	0.2	0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
25	Construction	-0.1	0.0	0.1	0.1	0.2	0.3	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
26	Retail and wholesale trade and warehousing	0.0	0.0	0.1	0.1	0.3	0.3	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
27	Transport services	-0.1	-0.1	0.1	0.1	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
28	Communications	0.1	0.0	0.2	0.2	0.3	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
29	Other financial services	0.0	0.1	0.1	0.2	0.2	0.3	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
30	Insurance	0.1	0.1	0.2	0.2	0.1	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
31	Other business services	0.1	0.0	0.2	0.1	0.3	0.3	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
32	Recreational and consumer services	0.0	0.0	0.1	0.1	0.2	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1
33	Other services (public health, education, residential)	0.0	0.1	0.2	0.3	0.3	0.3	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1

Table A.4 Skilled labour employment, % change

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
1	Chemicals, rubber, and plastics	0.0	-0.1	-0.1	-0.1	0.1	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
2	Other machinery and equipment	-0.5	-0.2	0.4	0.5	-1.2	-1.1	0.5	0.5	0.0	0.1	0.0	0.0	0.1	-0.1
3	Petro-chemicals	1.4	1.1	0.3	0.1	-0.2	-0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
4	Electrical machinery and equipment	-2.1	-0.4	-2.2	-1.4	4.3	5.6	0.4	0.5	-0.5	-0.1	-0.2	-0.5	-0.5	-0.6
5	Processed foods, n.e.c.	-0.3	-0.3	0.0	-0.1	0.2	0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
6	Iron and steel	3.9	5.0	-0.1	0.0	-1.0	-0.8	-0.1	-0.1	0.1	0.2	0.0	0.1	0.1	0.0
7	Motor vehicles	-3.8	-3.0	0.8	1.0	0.9	1.1	-1.9	-2.0	1.1	1.3	0.1	0.1	-0.9	-1.1
8	Crops, n.e.c. (except grains)	-1.6	-1.7	-1.8	-1.8	3.9	3.9	0.1	0.1	-0.5	-0.4	-0.2	-0.1	-0.3	-0.2
9	Vegetables and fruits	1.1	0.9	-0.2	-0.3	-0.2	-0.3	0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
10	Fabricated metals	0.3	0.5	0.1	0.2	-0.3	-0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1
11	Beverages and tobacco	1.6	1.5	0.1	-0.1	0.0	-0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
12	Non-ferrous metals	-0.2	-0.1	-0.4	-0.3	0.4	0.5	0.0	0.0	-0.2	-0.2	0.0	0.0	0.0	0.0
13	Vegetables oils	0.5	0.4	0.1	0.1	-0.6	-0.7	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
14	Paper, pulp, and publishing	0.2	0.1	-0.1	-0.1	-0.2	-0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2
15	Textiles	0.6	0.7	0.7	0.8	0.9	0.8	0.5	0.4	-0.4	-0.4	-0.2	-0.1	-0.3	-0.4
16	Dairy products	2.2	2.1	1.4	1.4	-3.6	-3.7	0.1	0.1	-0.2	-0.2	0.0	0.0	0.0	0.0
17	Manufactures, n.e.c.	-0.6	-0.8	0.2	0.3	0.3	0.3	0.1	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
18	Meats, except beef	-2.2	-2.3	-3.4	-3.5	3.7	3.6	0.2	0.2	-0.1	-0.1	0.1	0.1	0.2	0.2
19	Other transport equipment	-3.8	-3.5	-3.3	-3.1	3.1	3.1	-0.2	-0.1	0.1	0.2	0.1	0.1	-0.7	-0.8
20	Clothing	-0.2	-0.1	-0.3	-0.2	20.7	19.7	0.2	0.2	-0.1	-0.2	-0.6	-0.5	-0.3	-0.4
21	Oil, gas, and coal	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Wood products	0.1	0.2	0.1	0.1	-0.5	-0.4	0.2	0.2	0.0	0.0	0.1	0.2	0.2	0.4
23	Other goods	0.0	0.1	0.0	0.1	-0.7	-0.7	0.1	0.1	-0.1	-0.1	0.1	0.1	0.1	0.1
24	Utilities	0.1	-0.1	0.0	-0.1	0.1	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
25	Construction	0.0	0.2	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
26	Retail and wholesale trade and warehousing	-0.1	-0.2	0.0	-0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Transport services	0.5	0.3	0.1	-0.1	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.2	0.2
28	Communications	0.1	0.0	-0.1	-0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
29	Other financial services	0.1	0.2	0.3	0.3	-0.2	-0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
30	Insurance	0.1	0.0	1.5	1.5	-1.4	-1.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
31	Other business services	0.1	0.1	-0.2	-0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
32	Recreational and consumer services	0.0	0.0	-0.1	-0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
33	Other services (public health, education, residential)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table A.5 Unskilled labour employment, % change

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
1	Chemicals, rubber, and plastics	0.1	-0.1	0.0	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
2	Other machinery and equipment	-0.5	-0.1	0.4	0.5	-1.3	-1.2	0.5	0.5	0.0	0.1	0.0	0.0	0.1	-0.1
3	Petro-chemicals	1.5	1.2	0.3	0.2	-0.2	-0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
4	Electrical machinery and equipment	-2.1	-0.4	-2.2	-1.4	4.2	5.5	0.4	0.5	-0.5	-0.1	-0.2	-0.5	-0.5	-0.6
5	Processed foods, n.e.c.	-0.2	-0.3	0.0	-0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
6	Iron and steel	4.0	5.0	-0.1	0.0	-1.1	-0.9	-0.1	-0.1	0.1	0.2	0.1	0.1	0.1	0.0
7	Motor vehicles	-3.7	-3.0	0.9	1.0	0.8	1.0	-1.9	-2.0	1.1	1.3	0.1	0.1	-0.9	-1.1
8	Crops, n.e.c. (except grains)	-1.6	-1.7	-1.8	-1.8	3.8	3.9	0.1	0.1	-0.5	-0.4	-0.2	-0.1	-0.3	-0.2
9	Vegetables and fruits	1.1	0.9	-0.2	-0.3	-0.2	-0.3	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
10	Fabricated metals	0.3	0.5	0.1	0.2	-0.4	-0.3	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
11	Beverages and tobacco	1.6	1.5	0.1	-0.1	-0.1	-0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
12	Non-ferrous metals	-0.2	-0.1	-0.4	-0.3	0.4	0.4	0.0	0.0	-0.2	-0.2	0.0	0.0	0.0	0.0
13	Vegetables oils	0.5	0.4	0.1	0.1	-0.7	-0.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
14	Paper, pulp, and publishing	0.2	0.2	-0.1	-0.1	-0.2	-0.3	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2
15	Textiles	0.6	0.8	0.7	0.8	0.9	0.8	0.5	0.4	-0.4	-0.4	-0.2	-0.1	-0.3	-0.4
16	Dairy products	2.2	2.1	1.4	1.4	-3.6	-3.7	0.1	0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
17	Manufactures, n.e.c.	-0.5	-0.7	0.2	0.3	0.3	0.2	0.1	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
18	Meats, except beef	-2.1	-2.2	-3.4	-3.5	3.6	3.6	0.2	0.2	-0.1	-0.1	0.1	0.1	0.2	0.2
19	Other transport equipment	-3.8	-3.5	-3.3	-3.1	3.1	3.0	-0.2	-0.1	0.1	0.2	0.1	0.1	-0.6	-0.7
20	Clothing	-0.1	-0.1	-0.2	-0.2	20.6	19.6	0.2	0.2	-0.1	-0.2	-0.6	-0.5	-0.3	-0.4
21	Oil, gas, and coal	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Wood products	0.2	0.2	0.1	0.1	-0.5	-0.4	0.2	0.2	0.0	0.0	0.1	0.2	0.3	0.4
23	Other goods	0.0	0.1	0.0	0.1	-0.7	-0.8	0.1	0.1	-0.1	-0.1	0.1	0.1	0.1	0.1
24	Utilities	0.2	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	Construction	0.1	0.3	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Retail and wholesale trade and warehousing	-0.1	-0.1	0.0	-0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Transport services	0.6	0.3	0.1	0.0	0.0	-0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.2	0.2
28	Communications	0.1	0.0	-0.1	-0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
29	Other financial services	0.2	0.2	0.3	0.4	-0.2	-0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

	Sectors	NL		EU26		US		JP		AUS/NZ		BRIC		ROW	
		SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR	SR	LR
30	Insurance	0.1	0.0	1.5	1.5	-1.5	-1.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
31	Other business services	0.2	0.1	-0.1	-0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
32	Recreational and consumer services	0.1	0.1	-0.1	-0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
33	Other services (public health, education, residential)	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A.2 Additional CGE results, based on Ecorys (2010) NTM study specification

Table A.6 Actionable set of NTM's reduced – Macroeconomic effects

	Full liberalization of all actionable NTMs, short run	Full liberalization of all actionable NTMs, long run	Partial liberalization of all actionable NTMs, short run	Partial liberalization of all actionable NTMs, long run
Real income, million €				
United States	18.992	40.781	7.817	18.343
Netherlands	1.411	4.076	610	1.811
EU26	44.437	117.413	18.738	51.744
Real income, %				
United States	0.13	0.28	0.05	0.13
Netherlands	0.25	0.72	0.11	0.32
EU26	0.25	0.73	0.16	0.32
Terms of trade, %				
United States	-0.15	-0.23	-0.06	-0.10
Netherlands	0.12	0.07	0.05	0.03
EU26	0.11	0.07	0.05	0.03
Change in value added, %				
Netherlands	-0.02	0.41	-0.01	0.18
EU26	-0.02	0.42	-0.01	0.19
Change in value of exports, %				
Netherlands	1.41	1.69	0.63	0.76
EU26	1.64	2.03	0.72	0.88
Change in value of imports, %				
Netherlands	1.45	1.83	0.64	0.80
EU26	1.64	2.01	0.72	0.88

Table A.7 Actionable set of NTM's reduced – Percentage change in output

	NLD value added share, %	E26 value added share, %	Full liberalization of all actionable NTMs Short run	Full liberalization of all actionable NTMs Long run	Partial liberalization of all actionable NTMs Short run	Partial liberalization of all actionable NTMs Long run
Agr, forestry, fisheries	2.6	2.1	0.0	-0.1	0.0	0.0
Other primary sectors	1.7	0.7	0.0	0.0	0.0	0.0
Processed foods	3.6	3.0	0.6	0.9	0.3	0.4
Chemicals	2.2	3.1	1.6	2.2	0.7	1.0
Electrical machinery	0.4	0.4	-7.5	-5.5	-3.0	-2.1
Motor vehicles	0.5	1.7	5.1	5.7	2.0	2.3
Other transport equipment	0.7	0.6	-1.1	-0.9	-0.5	-0.4
Other machinery	1.8	4.1	-2.3	-1.9	-1.0	-0.8
Metals and metal products	1.8	2.3	-1.0	-0.5	-0.4	-0.2
Wood and paper products	2.7	2.4	-0.4	0.0	-0.2	0.0
Other manufactures	2.4	3.3	-0.4	0.1	-0.2	0.1
Water transport	0.6	0.4	0.3	0.5	0.1	0.2
Air transport	0.5	0.4	-0.1	0.3	0.0	0.1
Finance	2.5	3.4	0.0	0.4	0.0	0.2
Insurance	1.5	0.9	0.9	1.2	0.4	0.6
Business services	26.8	23.6	0.0	0.5	0.0	0.2
Communications	2.7	2.4	-0.3	0.2	-0.1	0.1
Construction	10.2	8.1	0.3	0.8	0.1	0.4
Personal services	3.5	3.5	-0.6	-0.1	-0.2	0.0
Other services	31.2	33.7	0.0	0.4	0.0	0.2
Total NLD	**100.0**		**0.0**	**0.4**	**0.0**	**0.2**
Total E26		**100.0**	**0.0**	**0.4**	**0.0**	**0.2**

Table A.8 Actionable set of NTM's reduced – Percentage change in value of exports

	NLD Export share %	E26 Export share, %	Full liberalization of all actionable NTMs, short run	Full liberalization of all actionable NTMs Long run	Partial liberalization of all actionable NTMs Short run	Partial liberalization of all actionable NTMs Long run
Agr, forestry, fisheries	10.1	3.5	-0.4	-0.9	-0.2	-0.4
Other primary sectors	3.9	1.9	0.0	-0.1	0.0	0.0
Processed foods	12.2	5.5	5.2	5.4	2.3	2.4
Chemicals	16.3	14.2	5.5	6.2	2.5	2.8
Electrical machinery	1.3	2.3	-6.7	-4.6	-2.6	-1.7
Motor vehicles	2.9	10.5	10.0	10.7	4.1	4.3
Other transport equipment	1.2	2.4	4.0	4.2	1.8	1.9
Other machinery	7.3	14.2	-3.0	-2.6	-1.3	-1.1
Metals and metal products	5.4	6.0	2.3	2.7	1.0	1.2
Wood and paper products	2.3	4.3	1.4	1.6	0.7	0.8
Other manufactures	15.3	11.8	-0.9	-0.4	-0.4	-0.1
Water transport	0.9	1.1	0.8	0.9	0.3	0.4
Air transport	2.2	2.1	0.5	0.6	0.2	0.3
Finance	0.4	2.1	2.3	2.6	1.1	1.2
Insurance	0.5	1.1	5.8	5.9	2.8	2.9
Business services	10.1	7.6	0.3	0.6	0.2	0.3
Communications	1.2	0.7	0.0	0.3	0.0	0.1
Construction	0.9	0.9	-0.3	0.2	-0.1	0.1
Personal services	0.8	1.5	-1.1	-0.8	-0.4	-0.3
Other services	5.0	6.2	-0.1	0.0	-0.1	0.0
Total NLD	**100.0**		**1.6**	**1.9**	**0.7**	**0.9**
Total E26		**100.0**	**1.8**	**2.3**	**0.8**	**1.0**

Table A.9 Actionable set of NTM's reduced - Change in value of exports, million €, EU 26

	Full liberalization of all actionable NTMs, short run	Full liberalization of all actionable NTMs, long run	Partial liberalization of all actionable NTMs, short run	Partial liberalization of all actionable NTMs, long run
Agr, forestry, fisheries	-1.257	-2.654	-536	-1.171
Other primary sectors	17	-132	5	-54
Processed foods	18.200	18.961	8.052	8.388
Chemicals	46.108	51.583	20.722	23.053
Electrical machinery	-10.341	-7.072	-4.035	-2.585
Motor vehicles	65.544	69.898	26.639	28.319
Other transport equipment	6.735	7.098	3.055	3.221
Other machinery	-23.982	-20.560	-10.339	-8.848
Metals and metal products	5.477	6.459	2.273	2.713
Wood and paper products	3.797	4.519	1.879	2.194
Other manufactures	-7.532	-3.152	-3.200	-1.220
Water transport	507	557	221	243
Air transport	526	739	268	363
Finance	2.116	2.338	1.017	1.114
Insurance	4.371	4.487	2.124	2.173
Business services	1.389	2.805	740	1.361
Communications	17	119	12	57
Construction	-138	83	-56	43
Personal services	-1.150	-875	-460	-339
Other services	-472	-21	-207	-10
Total	**109.932**	**135.179**	**48.174**	**59.018**

Table A.10 Actionable set of NTM's reduced - Change in value of exports, million €, Netherlands

	Full liberalization of all actionable NTMs, short run	Full liberalization of all actionable NTMs, long run	Partial liberalization of all actionable NTMs, short run	Partial liberalization of all actionable NTMs, long run
Agr, forestry, fisheries	-248	-524	-106	-231
Other primary sectors	2	-16	1	-7
Processed foods	2.645	2.755	1.170	1.219
Chemicals	3.446	3.855	1.549	1.723
Electrical machinery	-392	-268	-153	-98
Motor vehicles	1.166	1.243	474	504
Other transport equipment	216	228	98	103
Other machinery	-813	-697	-351	-300
Metals and metal products	324	382	134	160
Wood and paper products	135	160	67	78
Other manufactures	-637	-267	-271	-103
Water transport	28	30	12	13
Air transport	36	51	18	25
Finance	24	26	11	12
Insurance	108	111	53	54
Business services	120	243	64	118
Communications	2	12	1	6
Construction	-8	5	-3	3
Personal services	-39	-30	-16	-11
Other services	-25	-1	-11	-1
Total	**6.088**	**7.299**	**2.742**	**3.267**

Table A.11 Actionable set of NTM's reduced - Change in value of imports, million €, EU26

	Full liberalization of all actionable NTMs, short run	Full liberalization of all actionable NTMs, long run	Partial liberalization of all actionable NTMs, short run	Partial liberalization of all actionable NTMs, long run
Agr, forestry, fisheries	1.569	2.468	686	1.082
Other primary sectors	-1.496	3.619	-588	1.690
Processed foods	3.343	3.938	1.513	1.775
Chemicals	16.504	17.828	7.424	7.993
Electrical machinery	11.417	12.272	4.745	5.058
Motor vehicles	7.713	10.056	3.573	4.580
Other transport equipment	7.393	8.239	3.412	3.768
Other machinery	16.102	19.817	6.909	8.464
Metals and metal products	12.814	15.535	5.310	6.438
Wood and paper products	7.302	8.416	3.121	3.601
Other manufactures	6.929	8.393	2.950	3.591
Water transport	398	531	173	231
Air transport	791	1.188	346	523
Finance	1.934	2.344	910	1.090
Insurance	821	977	377	447
Business services	6.853	7.783	3.137	3.542
Communications	1.325	1.493	608	682
Construction	734	913	333	404
Personal services	5.019	5.251	2.279	2.381
Other services	5.266	7.181	2.257	3.099
Total	**112.733**	**138.244**	**49.476**	**60.438**

Table A.12 Actionable set of NTM's reduced - Change in value of imports, million €, The Netherlands

	Full liberalization of all actionable NTMs, short run	Full liberalization of all actionable NTMs, long run	Partial liberalization of all actionable NTMs, short run	Partial liberalization of all actionable NTMs, long run
Agr, forestry, fisheries	149	234	65	103
Other primary sectors	-105	254	-41	119
Processed foods	215	254	97	114
Chemicals	705	762	317	342
Electrical machinery	427	458	177	189
Motor vehicles	263	342	122	156
Other transport equipment	126	140	58	64
Other machinery	445	548	191	234
Metals and metal products	622	754	258	313
Wood and paper products	298	344	128	147
Other manufactures	409	495	174	212
Water transport	14	19	6	8
Air transport	26	38	11	17
Finance	51	62	24	29
Insurance	33	39	15	18
Business services	534	606	244	276
Communications	117	132	54	60
Construction	36	45	16	20
Personal services	265	278	120	126
Other services	388	529	166	228
Total	**5.017**	**6.333**	**2.203**	**2.773**

Annex B – Details on data classifications used

B.1 GTAP classification and aggregation applied in EU-US NTM study

In the Ecorys (2010) NTMs in EU – US Trade and Investment study, the original 58 sectors from the GTAP 7.0 database have been aggregated into 20 sectors that are used in modelling and reporting. The original study results for the EU and US, as well as the split-out of these results for the Netherlands (see section 3.2), make use of this classification into 20 sectors.

Aggregated sector in EU-US NTM study	Original GTAP-58 sectors	
Agr, forestry, fisheries	Paddy rice	Crops n.e.c.
	Wheat	Cattle, sheep, goats, horses
	Cereal grains n.e.c.	Animal products n.e.c.
	Vegetables, fruit, nuts	Raw milk
	Oil seeds	Wool, silk-worm cocoons
	Sugar cane, sugar beet	Forestry
	Plant-based fibres	Fishing
Other primary sectors	Coal	Minerals n.e.c.
	Oil	Meat: cattle, sheep, goats, horse
	Gas	
Processed foods	Meat products n.e.c.	Sugar
	Vegetable oils and fats	Food products n.e.c.
	Dairy products	Beverages and tobacco products
	Processed rice	
Chemicals	Chemical, rubber, plastic prods	
Electrical machinery	Electronic equipment	
Motor vehicles	Motor vehicles and parts	
Other transport equipment	Transport equipment n.e.c.	
Other machinery	Machinery and equipment n.e.c.	
Metals and metal products	Ferrous metals	Metal products
	Metals n.e.c.	
Wood and paper products	Wood products	
	Paper products, publishing	
Other manufactures	Textiles	Petroleum, coal products
	Wearing apparel	Mineral products n.e.c.
	Leather products	Manufactures n.e.c.
Water transport	Sea transport	
Air transport	Air transport	
Finance	Financial services n.e.c.	
Insurance	Insurance	
Business services	Business services n.e.c.	
Communications	Communication	
Construction	Construction	
Personal services	Recreation and other services	

Aggregated sector in EU-US NTM study	Original GTAP-58 sectors	
Other services	Electricity	Transport n.e.c.
	Gas manufacture, distribution	Public Admin / Defence / Health / Education
	Water	Dwellings
	Trade	

B.2 GTAP classification and aggregation applied in OECD liberalisation EU-US study

The Ecorys (2009) study on an FTA between the EU and other OECD countries (including the US) employed the GTAP 7.0 dataset. This version of the GTAP database employs 57 sectors, but the study has rearranged and grouped the original sectors into 33 sectors that are used in the study. The table below shows which GTAP sectors belong to which grouped sectors.

Aggregated sector in EU-US FTA study	Original GTAP-57 sectors	
Vegetables and fruits	GTAP 4 Vegetables and fruits	
Other crops	GTAP 8 Crops, n.e.c. (except grains)	
Oil, gas and coal	GTAP 15 Coal	GTAP 17 Gas
	GTAP 16 Oil	
Meats (except beef)	GTP 20 Meats, except beef	
Vegetable oils	GTP 21 vegetables oils	
Dairy products	GTP 22 dairy products	
Processed foods	GTP 25 processed foods, n.e.c.	
Beverages and tobacco	GTP 26 beverages and tobacco	
Textiles	GTP 27 textiles	
Clothing	GTP 28 clothing	
Wood products	GTP 30 wood products	
Paper, pulp and publishing	GTP 31 paper, pulp, and publishing	
Petro-Chemicals	GTP 32 petro-chemicals	
Chemicals	GTP 33 chemicals, rubber, and plastics	
Iron and steel	GTP 35 iron and steel	
Non-ferrous metals	GTP 36 non-ferrous metals	
Fabricated metals	GTP 37 fabricated metals	
Motor vehicles	GTP 38 motor vehicles	
Other transport equipment	GTP 39 other transport equipment	
Electrical machinery and equipment	GTP 40 electrical machinery and equipment	
Other machinery and equipment	GTP 41 other machinery and equipment	
Manufactures	GTP 42 manufactures, n.e.c.	
Utilities	GTAP 43 Electricity	GTAP 45 Water
	GTAP 44 Gas distribution	
Construction	GTP 46 construction	
Retails and wholesale trade	GTP 47 retail and wholesale trade and warehousing	
Transport services	GTAP 48 Other transport	GTAP 50 Air transport
	GTAP 49 Water transport	
Communications	GTP 51 communications	
Other financial services	GTP 52 other financial services	
Insurance	GTP 53 insurance	
Other business services	GTP 54 other business services	
Recreational and consumer services	GTP 55 recreational and consumer services	
Other services	GTAP 56 Other services (government)	GTA 57 Dwellings

Aggregated sector in EU-US FTA study	Original GTAP-57 sectors	
Other goods	GTAP 1 Paddy rice	GTAP 12 Wool
	GTAP 2 Wheat	GTAP 13 Forestry
	GTAP 3 Other grains	GTAP 14 Fishing
	GTAP 5 Oil seeds	GTAP 18 Other mining
	GTAP 6 Cane & Beet	GTAP 19 Cattle meat
	GTAP 7 Plant fibres	GTAP 23 Processed rice
	GTAP 9 Cattle	GTAP 24 Sugar
	GTAP 10 Other animal products	GTAP 29 Leather
	GTAP 11 Raw Milk	GTAP 34 Non-metallic minerals

B.3 Top Sector classification used in “Clusterkaarten” by Dialogic

In 2010, the Ministry of Economic Affairs commissioned Dialogic to map and carefully define selected economic clusters. In their publication on these clusters (called ‘cluster maps’), Dialogic mapped the most important players, policy initiatives and international positioning of the most important economic sectors in the Netherlands. The resulting overview (2011) presents the sectors by means of a data classification (SBI) and a qualitative description of the sector.

Since the Dutch Government has used (some of) the sector classifications presented by Dialogic in the formulation of the top sector policy, this study uses the information about the sectors to narrow down and frame the top sectors, mostly in terms of data. Hence, this classification is used as primary source for defining the top sectors statistically. The data from these sources have also been used directly for criterion 2 in the top sector selection (see section 4.3).

The table below presents an overview of the data sectors included in the various clusters studied by dialogic. The used data classification is the SBI 5-digit classification, on basis of the SBI-93 classification.

Sector		
Food, nutrition and flowers	**SBI code**	**SBI sector description**
Landbouw en visserij	0111	Akkerbouw
	01121	Teelt van groenten, bloemen en champignons
	0113	Fruitteelt
	0121	Fokken en houden van rundvee
	0122	Fokken en houden van overige graasdieren
	0123	Fokken en houden van varkens
	0124	Fokken en houden van pluimvee
	013	Akker- en/of tuinbouw in combinatie met het fokken en houden van
	01412	Dienstverlening voor de akker- en tuinbouw
	05	Visserij, kweken van vis en schaaldieren
Verwerkende industrie	15	Vervaardiging van voedingsmiddelen en dranken
	16	Verwerking van tabak
Gerelateerde activiteiten - Landbouw en visserij	2415	Vervaardiging van meststoffen en daarmee samenhangende stikstofverbindingen
Landbouw en visserij	242	Vervaardiging van landbouwchemicaliën
	293	Vervaardiging van landbouwmachines en –werktuigen
	5111	Handelsbemiddeling in landbouwproducten, levende dieren, textielgrondstoffen en –halffabrikaten en grondstoffen voor de voedings- en genotmiddelenindustrie
	7131	Verhuur van landbouw- en bosbouwmachines en -werktuigen
	73101	Speur- en ontwikkelingswerk op het gebied van landbouw en visserij

Sector		
	74301	Keuring en controle van agrarische producten en voedingsmiddelen
	74873	Veilingen van landbouw-, tuinbouw- en visserijproducten
	852	Veterinaire diensten
Gerelateerde activiteiten - Verwerkende industrie	2953	Vervaardiging van machines en apparaten voor de productie van voedings- en genotmiddelen
	5117	Handelsbemiddeling in voedings- en genotmiddelen
High tech systems & materials	**SBI code**	**SBI sector description**
Materialen	26	Vervaardiging van glas, aardewerk, cement-, kalk- en gipsproducten
	27	Vervaardiging van metalen in primaire vorm
Systemen	28	Vervaardiging van producten van metaal (geen machines en transportmiddelen)
	29	Vervaardiging van machines en apparaten
	30	Vervaardiging van kantoormachines en computers
	31	Vervaardiging van overige elektrische machines, apparaten en benodigdheden
	32	Vervaardiging van audio-, video- en telecommunicatieapparaten en -benodigdheden
	33	Vervaardiging van medische apparaten en instrumenten, orthopedische artikelen e.d., precisie- en optische instrumenten en
	34	Vervaardiging van auto's, aanhangwagens en opleggers
	352	Vervaardiging van rollend spoor- en tramwegmaterieel
	353	Vervaardiging van vlieg- en ruimtevaartuigen
	355	Vervaardiging van overige transportmiddelen n.e.g.
Gerelateerde activiteiten	5112	Handelsbemiddeling in brandstoffen, ertsen, metalen en chemische prod.
	5114	Handelsbemiddeling in machines, technische benodigdheden, schepen
	721	Hardware consultancy
	73102	Technisch speur- en ontwikkelingswerk
	73104	Overig natuurwetenschappelijk speur- en ontwikkelingswerk
	74115	Octrooibureaus
	74204	Technisch ontwerp en advies voor elektro-, installatietechniek en telematica
	74205	Technisch ontwerp en advies voor werktuig-, machine- en apparatenbouw
	74206	Technisch ontwerp en advies voor de procestechniek
	74207	Technisch ontwerp en advies niet gespecialiseerd
	74208	Overig technisch ontwerp en advies
	74302	Keuring en controle van machines, apparaten en materialen

Sector		
Life sciences	**SBI code**	**SBI sector description**
Farmaceutische industrie	1588	Vervaardiging van gehomogeniseerde preparaten en dieetvoeding
	244	Vervaardiging van farmaceutische producten
	51461	Groothandel in farmaceutische producten
	73103	Medisch en farmacologisch speur- en ontwikkelingswerk
Medische systemen en apparaten	331	Vervaardiging van medische apparaten en instrumenten en orthopedische en protheseartikelen
	51462	Groothandel in medische en tandheelkundige instrumenten, verpleeg- en orthopedische artikelen en laboratoriumbenodigdheden
Gezondheidszorg	85111	Academische ziekenhuizen
	85152	Oncologische en radiotherapeutische instituten
	85171	Medische laboratoria, bloedbanken en overige instellingen voor behandelingondersteunend onderzoek
Mainports & logistics	**SBI code**	**SBI sector description**
Transport en logistiek	6010	vervoer van personen en goederen per spoor
	60242	goederenvervoer over de weg (excl. verhuisvervoer)
	6030	goederenvervoer via pijpleidingen
	611	zeevaart
	61201	goederenvervoer met de binnenvaart: vrachtvaart
	61202	goederenvervoer met de binnenvaart: tankvaart
	61203	goederenvervoer met de binnenvaart: duwen en slepen
	6200	Vervoer van personen en goederen door de lucht
	6311	Laad- los- en overslagactiviteiten (zeeschepen en andere vervoermiddelen
	6312	Opslag (in tanks, koelhuizen en andere voorzieningen
	632	Overige dienstverlening voor het vervoer n.e.g.
	634	Expediteurs, cargadoors en bevrachters; weging & meting
Mainport Rotterdam		
Transport en logistieke deelcluster	611	zeevaart en protheseartikelen
	63111	Laad- los- en overslagactiviteiten voor zeeschepen orthopedische artikelen en
	63112	Laad- los- en overslagactiviteiten niet voor zeeschepen
	63121	Opslag in tanks
	63122	Opslag in koelhuizen
	63123	Opslag niet in tanks noch in koelhuizen
	6321	Overige dienstverlening voor het vervoer over land n.e.g.

Sector		
	6322	overige dienstverlening voor het vervoer over water n.e.g.
	63401	Expediteurs, cargadoors en bevrachters
	63402	Weging & meting
	60100	Vervoer per spoor
	60242	Weggoederenvervoer (excl. verhuisvervoer)
	61201	binnenvaart/vrachtvaart
	61202	binnenvaart/tankvaart
	61203	binnenvaart/duwen en slepen
	6030	pijpleidingen
	51912	groothandel scheepsbenodigdheden
	51390	Groothandel in voedings- en genotmiddelen algemeen assortiment
	518	Groothandel in machines, apparaten en toebehoren
	51913	groothandel in emballage
	51311	Groothandel in groenten en fruit
	51211	Groothandel in granen onderzoek
	71210	Verhuur van transportmiddelen voor vervoer over land (geen personenauto's)
	71342	Verhuur van machines en werktuigen n.e.g.
	71405	Verhuur van overige roerende goederen n.e.g.
	74702	Reiniging van transportmiddelen en overige reiniging
	74600	Beveiliging en opsporing
	7222	Ontwikkelen en produceren van maatwerk software; software consultancy
Petrochemisch en energie deelcluster	232	aardolieverwerking (raffinage e.a. verwerking)
	2411	Vervaardiging van industriële gassen
	2412	Vervaardiging van kleur- en verfstoffen
	2413	Vervaardiging van overige anorganische basischemicaliën
	2414	vervaardiging van petrochemische producten en overige organische basischemicaliën
	2416	vervaardiging van kunststof in primaire vorm
	5151	groothandel in brandstoffen en andere minerale olieproducten
	5155	groothandel in chemische producten
	74701	Reiniging van gebouwen

Sector		
	74201	Architecten- en technische ontwerp- en adviesbureaus voor burgerlijke en utiliteitsbouw
	73102	Technisch speur- en ontwikkelingswerk
Metaal	2811	Vervaardiging van metalen constructiewerken
	28510	oppervlakte behandeling
	28520	overige metaalbewerking
	29240	vervaardiging van gereedschap o.m. voor de metaalbewerking
Recycling	5157	Groothandel in afval en schroot
	37	Voorbereiding tot recycling
	900	milieudienstverlening
Deltatechnologie	3511	Nieuwbouw/reparatie van schepen (geen sport/recreatievaartuigen), baggermaterieel, booreilanden e.d.
	4524	Natte waterbouw
Mainport Schiphol		
Transport en logistieke deelcluster	6323	Luchthavens en overige dienstverlening voor het vervoer door de lucht n.e.g.
	6200	Vervoer door de lucht
	63401	Expediteurs, cargadoors en bevrachters
Gerelateerde diensten	7415	Concerndiensten en holdings (geen financiële holdings)
	67	Financiële beurzen, effectenmakelaars, assurantietussenpersonen, administratiekantoren voor aandelen, waarborgfondsen e.d.
Water	**SBI code**	**SBI sector description**
Watertechnologie	41	Winning en distributie van water
	9001	Afvalwaterinzameling en behandeling
Deltatechnologie	3511	Nieuwbouw en reparatie van schepen (geen sport- en recreatievaartuigen), baggermaterieel, booreilanden e.d.
	4524	Natte waterbouw
	74203	Technisch ontwerp en advies voor grond-, water- en wegenbouw
Chemicals	**SBI code**	**SBI sector description**
Chemie	24	Vervaardiging van chemische producten
	25	Vervaardiging van producten van rubber en kunststof
Gerelateerde activiteiten	232	Aardolieverwerking
	5112	Handelsbemiddeling in brandstoffen, ertsen, metalen en chemische producten
	73103	Medisch en farmacologisch speur- en ontwikkelingswerk

Sector		
Creative industries	**SBI code**	**SBI sector description**
Kunsten	9231	Beoefening van kunst
	92321	Theaters, schouwburgen en concertgebouwen
	92323	Dienstverlening voor kunstbeoefening en organisatie van culturele evenementen
	92521	Kunstgalerieën en expositieruimten
	92522	Musea
Media en entertainment	221	Uitgeverijen
	74811	Fotografie
	9211	Productie van (video)films
	9213	Vertoning van films
	9220	Radio en televisie
	92343	Overig amusement n.e.g.
	9240	Pers- en nieuwsbureaus; journalisten
Creatieve zakelijke dienstverlening	74201	Architecten- en technische ontwerp- en adviesbureaus voor burgerlijke en utiliteitsbouw
	74202	Technisch ontwerp en advies voor stedenbouw-, verkeers-, tuin- en landschapskunde, ruimtelijke ordening
	74401	Reclame-, reclameontwerp- en adviesbureaus
	74402	Overige reclamediensten
	74875	Interieur-, modeontwerpers e.d.
Energy	**SBI code**	**SBI sector description**
Aardolie, aardgas en steenkool	10	Turfwinning
	11	Aardolie- en aardgaswinning en dienstverlening voor de aardolie- en aardgaswinning
	23	Aardolie- en steenkool verwerkende industrie; bewerking van splijt- en kweekstoffen
	231	Vervaardiging van cokesovenproducten
	232	Aardolieverwerking
	40001	Productie van elektriciteit en warm water door thermische, kern- en warmtekrachtcentrales
Duurzame energie	233	Bewerking van splijt- en kweekstoffen
	40002	Productie van elektriciteit door windenergie
	40003	Productie van elektriciteit en warm water door zonn.e.c.ellen, warmtepompen en waterkracht

Sector		
Gerelateerde diensten	40004	Exploitatie van transportnetten voor elektriciteit, aardgas en warm
	40005	Handel in en distributie van elektriciteit, aardgas en warm water
	5112	Handelsbemiddeling in brandstoffen, ertsen, metalen en chemische producten
Business and financial services	**SBI code**	**SBI sector description**
Financiële diensten	65	Financiële instellingen (uitgezonderd verzekeringswezen en pensioenfondsen)
	66	Verzekeringswezen en pensioenfondsen (geen verplichte sociale verzekeringen)
	67	Financiële beurzen, effectenmakelaars, assurantietussenpersonen, administratiekantoren voor aandelen, waarborgfondsen e.d.
Overige zakelijke diensten	72	Computerservice en informatietechnologie
	73	Speur- en ontwikkelingswerk
	741	Rechtskundige dienstverlening, accountants, boekhoudbureaus, belastingconsulenten, markt- en opinieonderzoekbureaus, economische adviesbureaus en holdings
	744	Reclamebureaus e.d.
	74871	Kredietinformatie- en incassobureaus
	74872	Organiseren van beurzen, tentoonstellingen, braderieën e.d.
Broadband and ICT	**SBI code**	**SBI sector description**
Content	221	Uitgeverijen
	744	Reclamebureaus e.d.
	74811	Fotografie
	74875	Interieur-, modeontwerpers e.d.
	921	Activiteiten op het gebied van film en video
	922	Radio en televisie
	92343	Overig amusement n.e.g.
	924	Pers- en nieuwsbureaus; journalisten
Diensten	2221	Drukkerijen van dagbladen
	2222	Drukkerijen (geen dagbladen)
	223	Reproductie van opgenomen media
	642	Telecommunicatie
	7133	Verhuur van computers en kantoormachines
	72	Computerservice en informatietechnologie
Hardware	3002	Vervaardiging van computers

Sector		
	313	Vervaardiging van geïsoleerde kabel en draad
	3162	Vervaardiging van overige elektrische benodigdheden n.e.g.
	32	Vervaardiging van audio-, video- en telecommunicatieapparaten en benodigdheden
	332	Vervaardiging van meet-, regel- en controleapparaten (niet voor de bewaking van industriële processen)
	333	Vervaardiging van apparaten voor de bewaking van industriële processen
	73102	Technisch speur- en ontwikkelingswerk
	74204	Technisch ontwerp en advies voor elektro-, installatietechniek en telematica
	74208	Overig technisch ontwerp en advies

B.4 CBS preliminary data for baseline measurement of top sectors – work in progress

In order to statistically track the performance of the top sectors, the Dutch governmental statistical bureau CBS has recently initiated a process of defining the top sectors statistically, such that statistical measures and indicators can be linked to the top sectors. In the first stage, top sectors are defined on basis of the SBI classification. Four of the nine top sectors appeared to be able to be classified according to the SBI classification. For these sectors, an overview of the baseline scenario for different types of indicators is presented (work in progress by CBS, 2012). In the second stage, CBS aims to present a complete classification of the top sectors according to SBI and after meetings with the top teams. These other sectors require further study since not all goods and services can be easily classified.

The four sectors that have been classified in the first stage, with their respective corresponding SBI codes, are presented in the table below. This study has benefited from both the initial measures of the indicators presented by the CBS exercise and from the sector classifications.

Top sector		SBI codes					
Agro-food[68]	Primare productie	0111	0113	0140	0150	0161	0162
		0163	0170	03			
	Verwekende levensmiddelenindustrie	10	11				
	Groot- en detailhandel	4611	4621	4623	4624	463	4661
		46682	4711	472	4781	56	
	Overig	2015	2020	2830	2893	72111	72191
Life science & health	Farmacie	2110	2120				
	Medische instrumenten	2660	3250				
	Onderzoek	72112	72193				
High tech systems & materials	Metaalindustrie	24	252	253	254	255	256
		2573	2591	2593	2594	2599	3311
	Vervaardiging van machines en apparaten	26	27	28	3250	3312	3313
		3314	3319	332			
	Vervaardiging van transportmiddelen	2211	2229	2910	29201	2931	2932
		302	303	304	309	3316	3317
	Overig	6201	72192	7112	71202		
Chemicals	Aardolieverwerking	1910	19201	19202			
	Chemische industrie	2011	2012	2013	20141	20149	2015
		2016	2017	2020	2030	2041	2042
		2051	2052	2053	2059	2060	
	Rubber- en kunstofindustrie	2211	2219	2221	2222	2223	2229

[68] The limited definition includes only “primaire productie” and “verwerkende levensmiddelenindustrie”.

Annex C – Trade data

Table C.1 Overview of bilateral trade between the United States of America and the Netherlands

H2 code	Product	US-NL	NL-Us
01	Live animals	$10.622.106	$102.033.341
02	Meat and edible meat	$88.225.370	$11.948.763
03	Fish and crustaceans	$160.314.796	$39.349.086
04	Dairy produce	$16.259.676	$69.472.330
05	Products of animal origin, nes	$18.774.711	$2.505.407
06	Live trees and other plants	$49.209.048	$248.779.381
07	Edible vegetables	$33.435.539	$116.974.269
08	Edible fruit and nuts	$250.130.209	$5.140.793
09	Coffee, tea, mate and spices	$3.964.717	$12.736.594
10	Cereals	$8.997.447	$145.895
11	Products of the milling industry	$1.203.976	$41.944.682
12	Oil seeds and oleaginous fruits	$186.443.505	$100.260.059
13	Lac; gums and resins	$10.884.049	$4.054.542
14	Vegetable plaiting materials	$433.203	$1.103.493
15	Animal or vegetable fats and oils	$169.664.987	$35.408.606
16	Preparations of meat, of fish or crustaceans	$8.993.147	$1.168.483
17	Sugars and sugar confectionery	$23.240.864	$46.980.697
18	Cocoa and cocoa preparations	$8.372.837	$331.762.873
19	Preparations of cereals, flour, starch or milk	$16.481.026	$14.952.865
20	Preparations of vegetables, fruit, nuts	$162.970.683	$12.580.089
21	Miscellaneous edible preparations	$146.651.369	$36.108.900
22	Beverages, spirits and vinegar	$267.692.716	$1.045.681.921
23	Residues and waste from the food industries	$31.105.120	$13.137.141
24	Tobacco	$104.451.164	$9.455.293
25	Salt; sulphur; earths and stone;	$38.415.309	$15.890.569
26	Ores, slag and ash	$245.607.292	$1.415.177
27	Mineral fuels, mineral oils and distillation	$5.854.397.643	$3.284.961.611
28	Inorganic chemicals	$292.786.982	$786.521.480
29	Organic chemicals	$1.872.864.874	$1.093.081.733
30	Pharmaceutical products	$4.134.935.829	$4.171.213.950
31	Fertilisers	$11.689.219	$45.098.657
32	Tanning or dyeing extracts	$142.007.248	$113.704.904
33	Essential oils and resinoids	$340.731.573	$48.186.316
34	Soap, organic surface-active agents	$201.314.495	$38.892.833
35	Albuminoidal substances	$56.609.531	$95.819.559
36	Explosives; pyrotechnic products;	$15.140.626	$428.399
37	Photographic or cinematographic goods	$77.348.832	$53.992.919
38	Miscellaneous chemical products	$747.643.767	$258.961.494
39	Plastics and articles thereof	$1.052.698.659	$417.624.466

H2 code	Product	US-NL	NL-Us
40	Rubber and articles thereof	$217.784.396	$87.068.539
41	Raw hides and skins and leather	$11.443.040	$5.525.424
42	Articles of leather	$10.562.890	$3.790.606
43	Furskins and artificial fur	$75.091	$13.724.698
44	Wood and articles of wood	$72.439.389	$13.671.645
45	Cork and articles of cork	$85.969	$187.010
46	Manufactures of straw	$64.286	$147.221
47	Pulp of wood	$193.823.146	$913.830
48	Paper and paperboard	$250.805.411	$109.532.320
49	Printed books, newspapers	$91.653.015	$15.791.095
50	Silk	$60.339	$110.084
51	Wool, fine or coarse animal hair	$215.716	$253.326
52	Cotton	$9.448.325	$878.020
53	Other vegetable textile fibres	$6.175	$592.862
54	Man-made filaments	$54.556.447	$120.896.179
55	Man-made staple fibres	$28.511.838	$27.786.280
56	Wadding, felt and nonwovens	$18.904.553	$32.801.073
57	Carpets and other textile floor coverings	$7.406.506	$68.407.300
58	Special woven fabrics	$3.461.979	$8.870.388
59	Impregnated, coated, or laminated textile	$16.203.088	$42.396.955
60	Knitted or crocheted fabrics	$6.930.059	$173.747
61	Articles of apparel and clothing (knit)	$25.896.475	$3.445.764
62	Articles of apparel and clothing (not knitted)	$29.202.222	$7.839.842
63	Other made up textile articles	$43.434.416	$4.969.699
64	Footwear, gaiters	$15.371.989	$7.617.022
65	Headgear and parts thereof	$4.953.173	$672.441
66	Umbrellas, sun umbrellas, walking-sticks	$704.284	$27.853
67	Prepared feathers	$659.361	$194.968
68	Articles of stone, plaster, cement, asbestos	$31.776.478	$13.411.688
69	Ceramic products	$20.177.270	$11.854.595
70	Glass and glassware	$29.862.844	$38.603.697
71	Natural or cultured pearls, stones	$345.526.380	$15.602.759
72	Iron and steel	$78.927.915	$888.102.547
73	Articles of iron or steel	$122.702.281	$83.475.554
74	Copper and articles thereof	$55.325.668	$59.493.143
75	Nickel and articles thereof	$19.950.923	$36.394.058
76	Aluminium and articles thereof	$31.224.245	$41.278.872
78	Lead and articles thereof	$509.422	$565.010
79	Zinc and articles thereof	$3.723.141	$54.379
80	Tin and articles thereof	$467.886	$5.906.077
81	Other base metals; cermets	$15.616.878	$18.374.755
82	Tools, implements, cutlery	$97.977.822	$175.361.266
83	Miscellaneous articles of base metal	$37.160.144	$27.619.164
84	Nuclear reactors, boilers, machinery	$4.050.339.957	$4.046.617.355

H2 code	Product	US-NL	NL-Us
85	Electrical machinery and equipment	$3.331.806.606	$1.231.818.162
86	Railway or tramway locomotives	$8.279.026	$10.379.734
87	Vehicles other than railway or tramway	$489.959.350	$104.223.085
88	Aircraft, spacecraft, and parts thereof	$1.510.715.640	$480.150.890
89	Ships, boats and floating structures	$44.629.754	$63.518.507
90	Optical, photographic, measuring instruments	$5.232.387.900	$1.457.063.426
91	Clocks and watches and parts thereof	$5.193.572	$6.998.959
92	Musical instruments	$89.664.368	$8.701.947
93	Arms and ammunition	$32.878.171	$8.347.821
94	Furniture	$54.464.262	$59.046.176
95	Toys, games and sports requisites	$161.771.019	$17.564.377
96	Miscellaneous manufactured articles	$30.744.942	$4.039.953
97	Works of art, collectors' pieces and antiques	$123.037.985	$40.098.453
99	*(Reserved for special uses)*	$962.425.109	$58.543.503

Source: Comtrade database (Query: Reporter: {528; 842}; Partner: {842; 528}; Period: “2010”; Classification: “HS2007”; Commodities: “??”).

Annex D – Details on NTMs from MADB and Ecorys NTM study

NTMs identified in the Ecorys NTM Study

Table D.1 NTMs for EU-US trade and investment as found in the Ecorys NTM Study

Source	Sector	Name	Type of NTM	Subsector
Ecorys NTM study	Agrofood & Horticulture	Container Security Initiative (CSI).	Cross-cutting	
Ecorys NTM study	Agrofood & Horticulture	Custom surcharges.	Sector-specific	
Ecorys NTM study	Agrofood & Horticulture	US product standards which differ from international standards.	Sector-specific	
Ecorys NTM study	Agrofood & Horticulture	Direct and indirect government support by means of subsidies, protective legislation and tax policies to US farmers.	Sector-specific	
Ecorys NTM study	Agrofood & Horticulture	US Customs Refusal of EU Origin ("Made in EU").	Cross-cutting	
Ecorys NTM study	Agrofood & Horticulture	US prohibition to register/renew a trademark or a trade name which is identical or similar to a trademark or a trade name used in connection with a confiscated business.	Sector-specific	Pharma; Chemicals
Ecorys NTM study	Chemicals	Classification and labelling requirements for chemical products.	Sector-specific	Chemicals
Ecorys NTM study	Chemicals	Different local governments (below state level) implementing chemical security regulations.	Sector-specific	Chemicals
Ecorys NTM study	Chemicals	Different state level chemical security regulations.	Sector-specific	Pharma
Ecorys NTM study	Chemicals	Drug precursor legislation.	Cross-cutting	Chemicals
Ecorys NTM study	Chemicals	Evaluation and notification of new significant new uses.	Cross-cutting	Pharma
Ecorys NTM study	Chemicals	FDA New Drug Approval Process.	Cross-cutting	Pharma
Ecorys NTM study	Chemicals	Foreign Investment and National Security Act (FINSA), which can create excess costs for FDI.	Sector-specific	Chemicals
Ecorys NTM study	Chemicals	Indirect effects from food safety legislation – packaging in contact with food.	Cross-cutting	Pharma
Ecorys NTM study	Chemicals	Long/difficult authorisation and registration procedures.	Sector-specific	Pharma
Ecorys NTM study	Chemicals	US state-level safety certifications requirements.		Chemicals
Ecorys NTM	Chemicals	Pesticide/biocide testing and evaluation for	Cross-	Pharma

Source	Sector	Name	Type of NTM	Subsector
study		licensing.	cutting	
Ecorys NTM study	Chemicals	Prior authorization for sensitive product categories.	Cross-cutting	Chemicals; Pharma
Ecorys NTM study	Chemicals	Restrictions or bans on use of specific chemicals.	Sector-specific	Chemicals; Pharma
Ecorys NTM study	Chemicals	Very limited access of foreign companies to US government subsidy programmes (e.g. Technology Innovation Programme).	Sector-specific	Electronics
Ecorys NTM study	High Tech	3rd party testing for import products with EU declarations of conformity.	Sector-specific	Automotive
Ecorys NTM study	High Tech	American Automobile Labelling Act.	Cross-cutting	Automotive
Ecorys NTM study	High Tech	Civil Penalties for violations of statutes and regulations NHTSA pertaining to motor vehicle safety, bumper standards, and consumer information.	Sector-specific	Office, information & communication equipment
Ecorys NTM study	High Tech	Conformity assessment procedures.	Sector-specific	Automotive
Ecorys NTM study	High Tech	Different cetane levels in diesel fuel between EU and US – leading costs to tune engines to these different levels.	Sector-specific	Electronics
Ecorys NTM study	High Tech	Encryption Control Policy not in line with the Wassenaar arrangement.		Electronics; Office, information & communication equipment
Ecorys NTM study	High Tech	Energy conservation Program for Commercial and Industrial Equipment (EPCA).	Cross-cutting	Automotive
Ecorys NTM study	High Tech	Gas Guzzler Tax.	Cross-cutting	Aerospace
Ecorys NTM study	High Tech	International Traffic in Arms Regulations (ITAR) (space sector).	Cross-cutting	Communication services
Ecorys NTM study	High Tech	Licenses.	Cross-cutting	Communication services
Ecorys NTM study	High Tech	Limits imposed by CFIUS on the number/share of (foreign) firms.	Cross-cutting	Medical, Measuring and testing appliances
Ecorys NTM study	High Tech	Medical Device User Fee.	Cross-cutting	Electronics; Office, information & communication equipment
Ecorys NTM study	High Tech	Nationality or residence requirements for staff.	Sector-specific	Aerospace
Ecorys NTM study	High Tech	On-board equipment and instruments: Safety standards for Flight Guidance Systems and Proposed Revisions to "Automatic Pilot Systems Approval".	Sector-specific	Medical, Measuring and testing appliances

Source	Sector	Name	Type of NTM	Subsector
Ecorys NTM study	High Tech	Registration with FDA and compliance with FDA quality system regulations.	Cross-cutting	Automotive
Ecorys NTM study	High Tech	Reporting requirement on container transport: 10+2 regulation (Importer Security Filing).		Communication services
Ecorys NTM study	High Tech	Requirements regarding professional qualifications for foreign firms.		Communication services
Ecorys NTM study	High Tech	Restricted access to high speed internet connections for foreign firms.		Aerospace
Ecorys NTM study	High Tech	Restrictions on foreign launching services.		Communication services
Ecorys NTM study	High Tech	ATSC technology which is not compatible with DVB-T standards in EU.		Electronics; Office, information & communication equipment
Ecorys NTM study	High Tech	Non-transparency of standards.		Electronics; Office, information & communication equipment
Ecorys NTM study	High Tech	Safety of electrical and electronics products, non-harmonised standards, different from state to state.		Electronics
Ecorys NTM study	High Tech	Standards developed by different bodies (OSHA, National Electric Code and Industry safety standards).		Automotive
Ecorys NTM study	High Tech	Taxation of cars with high fuel consumption (CAFE = Corporate Average Fuel Economy).		Medical, Measuring and testing appliances
Ecorys NTM study	High Tech	State-wise certification according to Underwriters Laboratories.	Cross-cutting	Communication services
Ecorys NTM study	High Tech	Transfer delays, slow custom procedures (postal).	Sector-specific	Communication services
Ecorys NTM study	High Tech	US Customs Refusal of EU Origin ("Made in EU").	Sector-specific	Electronics; Office, information & communication equipment
Ecorys NTM study	High Tech	US legal liability philosophy.	Sector-specific	Office, information & communication equipment
Ecorys NTM study	High Tech	Third party testing for import products with EU declarations of conformity.	Cross-cutting	Aerospace; Automotive; Communication services; Electronics; Office, information & communication equipment

Source	Sector	Name	Type of NTM	Subsector
Ecorys NTM study	High Tech	US product standards which differ from international standards.	Sector-specific	Electronics; Office, information & communication equipment
Ecorys NTM study	High Tech	US state-level safety and power supply certifications.	Sector-specific	Aerospace
Ecorys NTM study	High Tech	US support to aircraft engine manufacturers (aeronotics).	Sector-specific	Aerospace
Ecorys NTM study	High Tech	US support to Boeing.	Sector-specific	Aerospace; Automotive; Electronics; Communication services
Ecorys NTM study	High Tech	Very limited access of foreign companies to US government support programmes.	Cross-cutting	
Ecorys NTM study	Horizontal	Classification and labelling differences between the EU and US.	Cross-cutting	
Ecorys NTM study	Horizontal	Diverging regulations in EU and US patent systems.	Cross-cutting	
Ecorys NTM study	Horizontal	Double certification need caused by The European Union's Authorized Economic Operator (AEO) program and the US Customs-Trade Partnership against Terrorism (C-TPAT).	Sector-specific	
Ecorys NTM study	Horizontal	Environmental regulations (e.g. EU Emission Trading Scheme).	Cross-cutting	
Ecorys NTM study	Horizontal	Intellectual property rights differences between the EU and US.	Sector-specific	
Ecorys NTM study	Horizontal	Restrictions in Government procurement (e.g. the Buy American Act, ARRA and SBA).		
Ecorys NTM study	Horizontal	Threat of 100% container scanning.	Cross-cutting	
Ecorys NTM study	Horizontal	Diverging technical standards.	Cross-cutting	

NTMs identified in the EC's Market Acces Database

Table D.2 NTMs for EU-US trade as found in the MADB

Source	Sector	Name	Description
MADB	Agrofood & Horticulture	Agricultural export subsidies and promotion	Less than before, but still present, e.g. the dairy export incentive programme. Also market access programme and export credit guarantee.
MADB	Agrofood & Horticulture	Export Credit Guarantee Program	The Export Credit Guarantee Programme which is managed by USDA/FAS has had a major impact on a number of key agricultural markets. Under this programme, the US government used to guarantee credits up to 98 % of the export value on a short-term to long term basis varying from up to 180 days under the Supplier Credit Guarantee Program SCGP, 3 years under the General Sales Manager (GSM) 102 and up to 10 years under GSM-103. Reforms after losing WTO dispute have not significantly changed the situation.
MADB	Agrofood & Horticulture	Farm bill	A key feature of the 2008 Farm Act was the introduction of a new support scheme for arable crops known as the Average Crop Revenue Election programme (ACRE). Also some higher reference prices, permanent disaster funds, subsidies for renewable energy production.
MADB	Agrofood & Horticulture	IPR: inadequate protection of GIs	EU GI stakeholders have complained that the protection of GIs in the US trademark system suffers deficiencies. Also issues related to wine (labels before 2006).
MADB	Agrofood & Horticulture	Marine Mammal Protection Act	Tuna catch and dolphins- Spain was refused membership of Inter-American Tropical Tuna Commission (IATTC), making exports to US difficult.
MADB	Agrofood & Horticulture	Pasturised Milk Products	According to an FDA notice published in January 2000 there are three options for firms interested in exporting Grade A dairy products to the US, the exporting company must sign a contract with a State, which must accept to treat it as if it were within its own jurisdiction (including the inspection and the control of the observance of the US regulation by inspectors of the State several times per annum);or the region/country of the exporting firm must adopt and comply with the US rules, in order to become a member of the Conference; or the programme and the regulations in the exporting country are recognised equivalent to the US programme by the FDA.
MADB	Agrofood & Horticulture	Rules for import of dairy products into USA	Similar to "Pasturised Milk Products".
MADB	Agrofood & Horticulture	Sanitary measures applied by USA for imports of live bivalve molluscs	The USA requires the testing of the water in which bivalve molluscs (e.g. oysters) are reared for coliforms, whereas the European Union requires testing of the flesh of the bivalve molluscs for Escherichia coli. Should be considered equivalent.
MADB	Agrofood & Horticulture	Slow procedures on applications to	New types of plants and plant products cannot be imported into USA before the phytosanitary requirements are decided

Source	Sector	Name	Description
		allow import of new types of plant products	on by the USA plant health authorities and afterwards included in US import legislation. This is required for every type of fruit or vegetable, and for many plants for planting. The procedure may take several years. In particular, EU applications to export have been pending for plants in growing media (some more than 20 years) and for fruits and vegetables (some more than 10 years).
MADB	Agrofood & Horticulture	United States-Bovine animals and products	In 1997, US introduced rules on the import of ruminant animals and products thereof from all European countries based on concerns about Bovine Spongiform Encephalopathy (BSE). These rules are still in place, however they are more strict than agreed in international standards set by the World Organization for Animal Health (OIE) creating disproportionate and discriminatory trade restrictions.
MADB	Agrofood & Horticulture	US Wine tax discrimination	Under US federal law, wine produced in or imported into the US is subject to a 'gallonage tax' with different tax bands according to the alcoholic content. However, small US producers not producing more than 250.000 gallons a year (= ca. 125.000 bottles / 10.000 crates) are eligible for a tax credit of USD 0,90 per gallon on the first 100.000 gallons, and a degressive rebate for production between 100.000 and 250.000 gallons. The tax credit is a rebate on the federal excise duty on wine; the excise duty is paid by producers upon selling wine or by the importer of wine at the moment of taking the wine out of the customs depot. Only US producers have access to the federal tax credit and tax rebate. In addition to the federal tax, differential fiscal measures and excise duties are also levied on wine at State level. These measures provide for tax breaks for small domestic producers or tax credits for local producers whilst no similar exemptions / benefits are granted to imported wine.
MADB	Agrofood & Horticulture	Wine Distribution	Some state legislation prevents cross-state retail sales of wines and spirits; prohibits EU exporters from distributing, rebottling, or retailing their own wine; requires duplicate label approvals; levies fees and charges; and other procedures. Direct distribution is becoming an increasingly important issue. Certain states allow in-state wineries to ship directly to retailers and restaurants, bypassing the traditional three-tier system. As a result of the 'Costco' ruling, states that allow such direct-distribution will be forced to open direct-distribution to out-of state producers or to eliminate direct-distribution rights altogether. However, foreign wines are not allowed to be distributed directly to retailers. A number of states, termed the 'reciprocal states', have agreed among themselves to facilitate the distribution of wines among themselves, whilst requiring imported wines to continue to be channelled via the more burdensome procedures and trade-restrictive concessionary networks. In

Source	Sector	Name	Description
			addition some state regulations on direct-to-consumer shipment are changing due to the US Supreme Court's Granholm ruling. As a result certain states are now allowing shipments of wine directly to consumers, if the winery obtains a permit from the state they wish to ship to. However, in most cases only domestic wineries are eligible to obtain the permit. In both cases, direct to consumers' shipment and direct distribution, state legislators do not take imported products into account when establishing regulations and appear to discriminate against foreign wines.
MADB	High Tech	Corporate Average Fuel Economy (CAFE) Payment	Since 1992 direct and indirect government support to the aircraft industry in the United States and the European Union has been regulated by the bilateral EU-US Agreement on Trade in Large Civil Aircraft. The US purported to unilaterally withdraw from the 1992 bilateral EC-US Agreement on Trade in Large Civil Aircraft in October 2004(a move that the EU continues to consider invalid as it did not respect the required conditions), and, on 6 October 2004, requested consultations regarding alleged support to Airbus by the EU and certain of its Member States (DS 316). The EU responded immediately by initiating WTO dispute settlement proceedings regarding a number of US measures, including federal state and local subsidies
MADB	High Tech	Electrical and Electronic Equipment Barriers	The Corporate Average Fuel Economy (CAFE) payment is a civil penalty payment levied on a manufacturer or importer whose range of models has an average fuel efficiency below a certain level, currently 27.5 miles per gallon (approx. 10.3 litres per 100km). CAFE favours large integrated automakers or producers of small cars rather than those who concentrate on the top end of the car market, such as importers of European cars. According to the latest estimates available, European-based auto makers with a total market share in the US of only 9%, bear almost 100% of the CAFE penalties. S According to the National Highway Traffic Safety Administration, most European manufacturers regularly pay CAFE civil penalties ranging from less than $1m to more than $20m annually.
MADB	High Tech	Jones Act and Shipbuilding Subsidies	Most electrical products in the EU go through a product approval process called "internal production control", which in international discussions often is referred to as Suppliers' Declaration of Conformity (SDoC). The European Commission requested that the US Occupational Safety & Health Administration (OSHA) deregulates its current procedures that require products to go through nationally recognised testing laboratories, ideally by a move towards SDoC. Nationally Recognised Testing laboratories (NRTLs) are third-party laboratories that have met OSHA requirements for performing safety testing and certification

Source	Sector	Name	Description
			of electrical and other products used in the workplace. NRTLs test and certify these products to determine whether they conform to appropriate U.S. product-safety testing standards. SDoC, applicable for most electrical products placed on the European Union market, obliges manufacturers to adhere to strict safety requirements and obliges them to be able to document compliance at all times. It leaves however the detailed modalities for the proof of compliance to the manufacturer and does not require him to use a locally recognised test laboratory. They therefore are free to use the services of any competent (e.g. accredited) test laboratory or use in-house competence.
MADB	High Tech	Steel Local Content Requirements	The Merchant Marine Act of 1920 "Jones Act", as amended in 1936, provides for various shipbuilding subsidies and tax deferments for projects meeting domestic built requirements. These are provided via the Operating Differential Subsidy (ODS), the Capital Constructions Fund (CCF) and the Construction Reserve Fund (CRF).Pursuant to this act, the United States prohibits the use, sale or lease of foreign built or foreign reconstructed vessels in commercial application between points in national waters or the waters of an exclusive economic zone. Despite the discriminatory nature of this US regulation, the United States is permitted to continue to apply the Jones Act under paragraph 3 of the GATT 1994. Pursuant to this article, the United States may prohibit the use, sale or lease of foreign built or foreign reconstructed vessels in commercial application between points in national waters or the waters of an exclusive economic zone. Even if there is strictly speaking no prohibition of import, we can see that this prohibition of use is a de facto prohibition on imports. Moreover, the definition of vessels has been interpreted by the US Administration to cover hovercraft and inflatable rafts. These limitations on rebuilding act as another discrimination against foreign materials the rebuilding of a vessel of over 500 gross tonnes (gt) must be carried out within the US if it is to engage in coastwise trade. A smaller vessel (under 500 gt) may lose its existing coastwise rights if the rebuilding abroad or in the US with foreign materials is extensive (46 U.S.C. 83, amendments of 1956 and 1960).The Merchant Marine Act also established under Title XI, the Guaranteed Loan Program to assist in the development of the US merchant marine by guaranteeing construction loans and mortgages on US flag vessels built in the US. In 1993, this was extended to cover vessels for export. In December 1994, the OECD Shipbuilding Agreement was signed. It aims at the elimination of all direct and indirect support in the shipbuilding sector and was expected to have an impact on the US subsidy programme. The EU, South Korea and Norway deposited their

Source	Sector	Name	Description
			instruments of ratification for the Agreement in December 1995 with Japan following in June 1996. Opposition in the Congress originating from the naval industry prevented the US from ratifying the Agreement. Subsequent bills attempting to implement the ratification failed and the US did not enter the Agreement in 2001. During FY2000, the Maritime Administration (MARAD) approved US$886 million worth of Title XI guaranteed loan applications for 15 vessels and barges and 2 cruise ships. From FY2001-2004 MARAD has approved over US$1258 million in loan guarantees. For Fiscal Year 2004, the Maritime Administration (MARAD) approved $152 million in loan guarantees. For Fiscal Year 2005, MARAD approved $140 million in loan guarantees. This measure is subject to a substantive review in the WTO according to Article III of the GATT.
MADB	High Tech	Boeing Subsidies	Since 1992 direct and indirect government support to the aircraft industry in the United States and the European Union has been regulated by the bilateral EU-US Agreement on Trade in Large Civil Aircraft. The US purported to unilaterally withdraw from the 1992 bilateral EC-US Agreement on Trade in Large Civil Aircraft in October 2004(a move that the EU continues to consider invalid as it did not respect the required conditions), and, on 6 October 2004, requested consultations regarding alleged support to Airbus by the EU and certain of its Member States (DS 316). The EU responded immediately by initiating WTO dispute settlement proceedings regarding a number of US measures, including federal state and local subsidies (DS 317).For its part, the EU is challenging various US State subsidies benefiting Boeing. These subsidies amount to billions of USD for Boeing. Illustrative examples include a USD 4 billion package in the State of Washington (combining tax breaks, tax exemptions or tax credits and infrastructure projects for the exclusive benefit of Boeing) and a USD 900 million package in the State of Kansas in the form of tax breaks and subsidised bonds. As regards US federal measures, the EU has successfully challenged the tax breaks -- in theory repealed in 2006 by US legislation -- offered to Boeing under the Foreign Sales Corporation successor legislation, the American Jobs Creation Act. These tax benefits, which the EU estimates at a value to Boeing of USD 2.1 billion over the period 1989-2006, were supposed to end on 1 January 2007. However, a recent official IRS Memorandum allows US exporters, including Boeing, to continue to benefit from the illegal tax breaks even after the end of 2006 which should have marked the end of all benefits under the FSC and successor legislation. The EU is challenging these continued subsidies to Boeing, which could amount to USD tens/hundreds of millions. In addition to the federal tax breaks, the EU is

Source	Sector	Name	Description
			challenging the US system under which: federal R&D contracts ultimately benefit Boeing's LCA division and Boeing's aircraft models;- Boeing sees its own R&D expenses reimbursed;- Boeing benefits from extensive cooperation with NASA and DOD engineers at no cost;- Boeing is able to use testing facilities and equipment also at no cost. In addition, under this system, a large number of patents and other technologies are put at the disposal of Boeing free of charge, including through the transfer of patents held by US federal agencies (and resulting from US government funded research) to Boeing. The EU estimates the total benefits of federal research programs to Boeing at around USD 16.6 billion. The EU considers that the above mentioned subsidies are in violation of Articles 3, 5, and 6 of the SCM Agreement and Article III of the GATT 1994.The EU intends to demonstrate before the WTO panel that the above subsidies benefiting Boeing have allowed the company to engage in aggressive pricing of its aircraft which has caused lost sales for and injury to Airbus. Consultations were held in Geneva on 5 November 2004. On 12 January 2005, the EU and the US agreed to suspend WTO action for 3 months pending discussions towards the conclusion of a new bilateral agreement on subsidies for Large Civil Aircraft. However, both sides did not reach an agreement and in the following, the US requested the establishment of a panel on 31 May 2005; the EU submitted a similar request the same day. During the DSB meeting on 13 June 2005, the US argued that a number of the measures referred to in the EU panel request of 31 May 2005 were not listed in the consultation request of October 2004. For reasons of absolute legal certainty, the EU on 27 June 2005 filed a second consultation request which explicitly lists all the measures in question. The US has accepted the request for consultations, which were held in Geneva on 3 August 2005.The Panel was established on 20 July 2005 and composed on 17 October 2005. The first phase of the fact-gathering (Annex V) procedure was completed by 22 December 2005 with the submission of replies by the parties to follow-up questions posed on information submitted on 18 November. The Facilitator submitted his report on the above procedure to the Panel on 24 February 2006.During the Annex V procedure the US refused to provide information, inter alia, on 13 programmes not explicitly listed in the initial consultation request of the EU. Unlike the EU, which filed a request for preliminary rulings in DS316 on 26 October 2005 requesting the Panel to clarify the scope of the proceeding, the US refused to do so in DS317. In view of this, on 23 November 2005 the EU requested the Panel to invite the US to make a preliminary ruling request before the completion of the Annex V

Source	Sector	Name	Description
			process, or take any other decision with equivalent effect. The Panel did not issue such a decision. The final working procedures only require the US to make a preliminary ruling request at the latest at the time of their first submission. This situation of procedural limbo needed to be resolved quickly, since the US non-cooperation deprived the EU of access to documents falling within the scope of the dispute, in particular regarding NASA and Department of Defence subsidies. Consequently, the EU on 20 January 2006 filed a request for the establishment of a (second) panel based on its second request for consultations of 27 June 2005. The (second) panel (for DS317) was established on 17 February 2006. Subsequently, the US submitted a second consultation request in DS316 on 31 January 2006 (now DS 347), which has largely the same purpose as the EU request, i.e. to explicitly list measures which were contained in the US panel request, but not in the consultation request. The US repeatedly blocked the initiation of an Annex V process during DSB meetings. On 23 May 2006 the EU transmitted Annex V questions for the US to the Facilitator. The questions were substantially identical to the questions submitted in the previous Annex V procedure, but some new questions had been added. This was followed by a meeting between the parties, the Facilitator and the WTO Secretariat to resolve the blockage of the Annex V procedure, to no avail. The Facilitator then informed parties on 6 June 2006 that his views were that the initiation of an Annex V procedure requires positive consensus -- the EU objected, providing its own understanding of WTO law. The EU requested the WTO Director General to compose the panel in DS317 bis (second offensive EU case) on 17 November 2006. The Panel was composed on 23 November 2006, with Mr. Crawford Falconer as Chairman, and Mssrs. Franciso Orrego Vicuna and Varachai Plasai as Members. On 4 December 2006 the WTO Secretariat renamed DS317 bis, which became DS353.Pursuant to the composition of the Panel, the EU filed a request for preliminary ruling to the Panel on 24 November 2006, asking the Panel to:- either rule that the Annex V information-gathering procedure had been initiated at the EU"s request in April/May 2006, and that the US was under an obligation to answer the questions that have been put to them on 23 May 2006- or, alternatively, to use its fact-seeking powers under Article 13 DSU to request the US to provide relevant information that would be identified by the EU. The Panel rejected the EU's requests, and responded that it would not use its Article 13 DSU prerogatives before the parties have filed their first written submissions. Subsequently, following the first meeting of the Panel with the parties, the Panel posed questions to the Parties,

Source	Sector	Name	Description
			including a number of questions to the US that related to the EU's earlier request. The EU filed its first written submission on 22 March 2007. The US for its part filed its first written submission on 6 July 2007. Third Parties filed their first written submissions on 1 October 2007.The first meeting of the Panel with the parties took place on 26 and 27 September 2007. The Parties had also agreed that parts of the hearing should be open to the public. As a result, a public screening of the open parts of the hearings was scheduled to take place at the WTO on 28 September 2007.The Parties filed their rebuttal submissions on 19 November 2007 (instead of 6 November 2007 as initially scheduled), and filed their responses to the Panel's questions, on 5 December 2007. The first meeting of the Panel with the Third Parties will take place on 15 January 2008, followed by the second meeting of the Panel with the Parties on 16-17 January 2008. According to the current timetable, the issuance of the final Panel report is due on 16 June 2008.In addition to the WTO case, the EU has also expressed its concern over legislation (Fiscal Year 2002 Defence Appropriations Act) that would have allowed 100 tanker aircraft to be ordered by the US Air Force (USAF) from Boeing (KC-767A tanker program) without allowing real competition from EADS/Airbus, which would have resulted in procurement at a price substantially above the market value of the aircraft. This legislation may also have contributed to a procurement scandal within the Air Force leading to several criminal, legislative, and administrative investigations of both government and Boeing officials, and to the cancellation of the contract awarded to Boeing under the KC-767A tanker program. In the wake of these investigations, the Fiscal Year 2005 Defence Authorization Act, which would seem to allow for competition, and the pledge by DoD (following a report of the DoD Inspector General on this matter) to seek such competition should the Air Force decide it needs new aircraft, chances for true competition appear much better. The Request for Information from USAF included language that would in effect have prevented EADS and its partner Northrop-Grumman to bid in the new competition. This language was subsequently removed from the Request for Proposal. The European Commission will continue to monitor the situation.
MADB	Horizontal	Anti-dumping measures: practice of zeroing	Zeroing is a calculation device used by the United States for increasing, often substantially, the exporter's margin of dumping and thus the amount of anti-dumping duty paid. Zeroing has two main effects on EU exporters. Firstly, it increases the amount of duty paid on those goods exported to the US, thus reducing their competitiveness. Secondly, by increasing the rate of anti-dumping duty, it deters many exporters from exporting to the US at all. It is important to

Source	Sector	Name	Description
			note that in reviews, the US can either increase or decrease the level of anti-dumping duty. This contrasts with the EC system, in which anti-dumping duties can only be refunded to importers if the dumping margin goes down, not increased if it goes up. In addition, while the EC compares average prices in such cases, the US uses zeroing (i.e. it disregards the non-dumped transactions). Hence, zeroing in reviews in the US system (with its ability to increase the duty rate) can be said to give the US a "structural advantage" over the EC and other WTO Members.
MADB	Horizontal	Berry Amendment to the 1941 Defence Appropriations Act	The concept of national security was originally used in the 1941 Defence Appropriation Act to restrict procurement by the DoD to US sourcing. Now known as the Berry Amendment, its scope has been extended to secure protection for a wide range of products only tangentially related to national security concerns -- for example, the 1992 General Accounting Office ruling that the purchase of fuel cells for helicopters is subject to the Berry Amendment fabric provisions, and the withdrawal of a contract to supply oil containment booms to the US Navy because of the same textile restrictions.
MADB	Horizontal	Byrd Amendment (Continued Dumping and Subsidy Offset Act)	The Continued Dumping and Subsidy Offset Act (CDSOA or the so-called Byrd Amendment) signed into law in October 2000, provides that proceeds from anti-dumping and countervailing duties shall be paid to the US companies responsible for bringing the cases. Following the condemnation of the Byrd Amendment in the WTO in January 2003, the United States finally repealed the Byrd Amendment on 8 February 2006, but allowed for a transition period. The repeal will not affect the distribution of the anti-dumping and countervailing duties collected on imports made before 1 October 2007. Since in the US, these duties are usually collected several years after the import, this means, in turn, that distribution under the Byrd Amendment may continue for several years after 1 October 2007. The Congressional Budget Office foresees that the repeal of the Byrd Amendment will not produce effects before 1 October 2009.
MADB	Horizontal	Container Security Initiative (CSI)	The US launched the Container Security Initiative (CSI) in 2002 so as to counter potential terrorist threats to the international maritime container trade system. The CSI consists of 4 elements: security criteria to identify high-risk containers; pre-screening containers before they arrive to US ports; using technology to pre-screen high-risk containers and developing and using smart and secure containers. The CSI screening and related additional US customs routines are allegedly causing significant additional costs and delays to shipments of EU machinery and electrical equipment to the US. This burden is so severe that a number of small European engineering companies

Source	Sector	Name	Description
			have decided not to export to the US any longer because of CSI. There is also competitive distortion in this fiercely competitive engineering market between EU and US engineering companies since up to now there is, de facto, no reciprocity between the EU and the US.
MADB	Horizontal	FDI limitations imposed by the CFIUS / FINSA framework	The Foreign Investment and National Security Act of 2007 ("FINSA") amends the so-called Exon-Florio amendment of the Defence Production Act of 1950, which authorises the US President to investigate foreign acquisitions, mergers, and takeovers of, or investments in, US companies from a national security perspective.
MADB	Horizontal	Helms-Burton Act	The Helms-Burton Act among others (a) allows US citizens to file lawsuits for damages against foreign companies investing in confiscated US (including Cuban-American) property in Cuba (Title III of the Act) and (b) requires the US Administration to refuse entry to the US of the key executives and shareholders of such companies (Title IV of the Act). The EU is of the view that these measures are contrary to US obligations under the WTO Agreements, in particular the GATT and GATS. In that respect, the EC initiated a WTO dispute settlement procedure on 3 May 1996.
MADB	Horizontal	Hormones Dispute (Continued Suspension of Obligations)	In 1989 the EU banned imports of hormone treated meat. The US and Canada responded by imposing retaliatory measures, suspending their obligations and imposing import duties in excess of bound rates on imports from the EU, and by initiating a WTO dispute settlement proceeding. The EU based its new Hormones Directive of 22 July 2003 on a full scientific risk assessment. Despite compliance with WTO rules the US (and Canada) to this date continue to apply their retaliatory measures.
MADB	Horizontal	Iran Non-Proliferation Act	On 14 March 2000, the Iran Non-Proliferation Act (INPA) was signed into law. It provides for discretionary sanctions against foreign companies transferring to Iran goods, services and technology listed under the international export control regimes, as well as any other item prohibited for export to Iran under US export control regulations, as potentially contributing to the development of weapons of mass destruction.
MADB	Horizontal	Iran-Libya Sanctions Act and Iran Freedom Support Act	The Iran and Libya Sanctions Act (ILSA), signed into law on 5 August 1996, provided for mandatory sanctions against foreign companies that made an investment above US$20 million contributing directly and significantly to the development of petroleum or natural gas in Iran or Libya. In addition, mandatory sanctions were also applicable against companies that violated the UN Security Council trade sanctions against Libya.
MADB	Horizontal	Lacey Act - Scope and implementation of	The Lacey Act serves as an anti-trafficking law protecting a broad range of wildlife and wild plants. In May 2008, the Lacey Act was amended to extend its scope to all plants,

Source	Sector	Name	Description
		the US legislation to combat illegal logging	including timber or associated wood products with the objective to combat illegal logging. The amendment added a new requirement for an import declaration, which will oblige importers of covered plants and plant products to list shipment information along with information such as plant scientific name and country of harvest to prove compliance with the Lacey Act requirements. Domestic products are not subject to similar reporting requirements.
MADB	Horizontal	Memoranda of Understanding (Defence Acquisitions)	There has been a trend towards making the DoD's other domestic preferences, apart from the Buy American Act preferences, less restrictive by expanding the preference to qualifying countries. These are countries that maintain reciprocal memoranda of understanding (MoU) with the US. The following examples illustrate the large variety of obstacles facing EU exporters to the US: - Specific requirements to produce goods on US soil; - There is no grant-back given for changes made to products by the licensee; - Foreign comparative tests (FCT) are carried out to assess the best product for goods not produced in the US; - Barriers arising from the use of the Foreign Military Sales Regulation (FMSR); - Technical data / Technology export control requirements; - US subsidiaries; - Lack of access to bidder conferences/security clearance considerations.
MADB	Horizontal	Principle of First-to-Invent	The US patent system applies the principle of "first-to-invent", while the rest of the world follows the principle of "first-to-file", fixing thereby a clearly defined moment when the priority right to a patent is established. The first-to-invent principle creates several obstacles for EU and US companies trying to obtain a patent right in the US, namely because it has a considerable economic impact on the potential right holder.
MADB	Horizontal	Procurement: Buy American Act	The Buy American Act (BAA), initially enacted in 1933, is the core domestic preference statute governing US procurement. It covers a number of discriminatory measures, generally termed Buy American restrictions, which apply to government-funded purchases. The Executive Order 10582 of 1954, as amended, expanded the scope of the BAA in order to allow procuring entities to set aside procurement for small businesses and firms in labour surplus areas, and to reject foreign bids either for national interest or national security reasons.
MADB	Horizontal	Section 407 of the Trade and Development Act (Carousel Law)	Section 407 of the Trade and Development Act enables the U.S. Trade Representative (USTR) to periodically revise the list of products subject to retaliation when, according to the U.S., another country fails to implement a WTO dispute decision. The periodic revision of the law has become known as "carousel retaliation." The law provides for a

Source	Sector	Name	Description
			mandatory and unilateral revision of the list of products subject to suspension of GATT concessions 120 days after the application of the first suspension and then every 180 days thereafter.
MADB	Horizontal	Small Business Act	The Small Business Act of 1953 (SBA), as amended, requires executive agencies to place a fair proportion of their purchases with small businesses. Under the SBA, any contract for the purchase of goods or services with an estimated award value greater than US$3,000 but not exceeding US$100,000 will be automatically set-aside for (US) small business unless fewer than two small businesses submit competitive bids for that procurement. Small business set-asides can occur in procurements above US$100,000 on a discretionary basis. In addition to meeting certain size criteria, a business is eligible for small business status, for procurement purposes, only if it maintains a place of business in the US and makes a significant contribution to the US economy through payment of taxes and/or use of US products, materials, and/or labour.
MADB	Horizontal	US Customs Refusal of EU Origin ("Made in EU")	US Customs does not recognise the EU as a country of origin, nor does it accept EU certificates of origin. In order to justify EU country of origin status, EU firms are required to furnish supplementary documentation and follow further procedures, which can be a source of additional costs.
MADB	Horizontal	US Dual-Use Export Controls	A comprehensive system of export controls was established under the Export Administration Act of 1979 (EAA) and the US Export Administration Regulation (EAR) to prevent trade to unauthorised destinations. This system, among other things, requires companies, incorporated and operating in EU Member States, to comply with US re-export controls. License Exception APR (Additional permissive reexports) allows the reexports from Country Group A:1 and cooperating countries, but that does not include Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia. This includes compliance with US prohibitions on re-exports for reasons of US national security and foreign policy.

Annex E – Interviews

Table E.1 List of people consulted for this project

Nr	Sector	Naam	Branche of Bedrijf
1	Agro& Food	**Murk Boerstra**	Top team
2	Agro&Food	**Frans van Dongen**	Branche
3	Agro&Food	**Hans Leersen**	Branche
4	Agro&Food	**Wim Kloosterboer**	Bedrijf
5	Agro&Food	**Jan Maarten Vrij**	Branche
6	Agro&Food	**Willlem-Jan Laan**	Branche + bedrijf
7	Horticulutre	**Rubert Konijn**	Top team
8	Horticulture	**Henk Westerhof**	Branche
9	Horticulture	**Inge Ribbens**	Branche
10	Horticulture	**Marian de Beuze**	Branche
11	Horticulture	**Paul van der Zweep**	Branche
12	High-tech	**Marc Hendrikse**	Top team
13	High Tech	**Arjan Vergouw**	Bedrijf
15	High Tech	**Aart Jan Smits**	Bedrijf
16	High Tech	**Bettina Tammes**	Bedrijf
17	High Tech	**Gert Demmink**	Bedrijf
18	Chemicals	**Rob Hartman**	Bedrijf
19	High Tech	**Jaap Decarpentier Wolf**	Bedrijf
20	High Tech	**Micha van Lin**	Branche
21	Chemicals	**Cees Maagdenberg**	Branche/ top team
22	Chemicals	**Rein Coster**	Branche
23	Chemicals	**Sabine van Gastel**	Bedrijf
24	Chemicals	**Jeroen Jochems**	Bedrijf

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