FINAL

JOINT STATEMENT OF THE 20th MEETING OF WORLD SEMICONDUCTOR COUNCIL (WSC)

MAY 26, 2016
Seoul, Korea

The world's leading semiconductor industry associations – consisting of the Semiconductor Industry Associations (SIAs) in China, Chinese Taipei, Europe, Japan, Korea and the United States – held the 20th meeting of the World Semiconductor Council (WSC) today. This meeting, held in Seoul, Korea, was conducted under the "Agreement Establishing a New World Semiconductor Council," approved at the third WSC meeting and signed on June 10, 1999, and amended on May 19, 2005.

The WSC meets annually to bring together industry leaders to address issues of global concern to the semiconductor industry. The WSC has the goal of promoting cooperative semiconductor industry activities, to expand international cooperation in the semiconductor sector in order to facilitate the healthy growth of the industry from a long-term global perspective. It also supports expanding the global market for information technology products and services. Further, it promotes fair competition, technological advancement, and sound environmental, health and safety practices. The WSC's mandate is also to encourage cooperation in such areas as environment, safety and health practices, protection of intellectual property rights, open trade, investment liberalization, and market development.

All WSC activities are guided by a dedication to fairness and market principles consistent with World Trade Organization (WTO) rules and WSC

member association bylaws. The WSC reaffirms that markets should be open and competitive. Antitrust counsel was present throughout the meeting.

The meeting was chaired by Sung Wook Park, CEO of SKhynix and chair of the host Delegation of Semiconductor Industry Association in Korea. Mr. Park welcomed the delegates to Seoul. The other delegations attending the 20th WSC meeting – the SIAs in China, Chinese Taipei, Europe, Japan, and the US – were chaired, respectively, by Mr. Tzu-Yin Chiu of Semiconductor Manufacturing International Corporation, Mr. Nicky Lu of Etron Technology, Mr. Arunjai Mittal of Infineon Technologies, Mr. Shozo Saito of Toshiba Corporation, and Mr. Necip Sayiner of Intersil.

During the meeting, the following reports were given and discussed, and related actions were approved:

Analysis of Semiconductor Market Data

The WSC reviewed a semiconductor market report covering market scale, market growth and other key industry trends. The report found that, according to WSTS data, in 2015 the semiconductor market was stable and experienced a value of 335 Billion US$, nearly unchanged from the record high established in 2014. Asia/Pacific (including China) remained the region with the highest YoY (year over year) growth rate as well as contributing the largest portion in worldwide market size. In terms of product types, logic maintained the largest segment, followed by memory, while optic and analog products experienced the fastest annual growth among all types of semiconductors. With respect to applications, industrial and consumer segments gained market share, while communication and computer applications remained the largest segments.

Cooperative Approaches in Protecting the Global Environment

The WSC is firmly committed to sound and positive environmental policies and practices. The members of the WSC are proactively working together to make further progress in this area.

A. PFC (Perfluorocompound) Emissions

The global semiconductor industry is a very minor contributor to overall emissions of greenhouse gases, and the industry is continuously working to further reduce our contribution to emissions of GHGs. One important part of our GHG emission reduction efforts is our voluntary reduction of PFC gas emissions. In 1999, the WSC (consisting at that time of each of the original regional semiconductor associations in the U.S., the European Union, Japan, Korea, and Chinese Taipei) agreed to reduce PFC emissions by at least 10% below individual baselines for each regional semiconductor association by the end of 2010. The WSC has previously announced that, the industry had far surpassed this goal. Over the 10-year period, the WSC has achieved a 32% reduction. In 2011, the WSC also announced a new voluntary PFC agreement for the next 10 years. The elements of the 2020 goal include the following:

- The implementation of best practices for new semiconductor fabs. The industry expects that the implementation of best practices will result in a Normalized Emission Rate (NER) in 2020 of 0.22 KgCO2e/cm2 equivalent to a 30% NER reduction from 2010 aggregated baseline. Best practices will be continuously reviewed and updated by the WSC.
- The addition of “Rest of World” fabs (fabs located outside the WSC regions that are operated by a company from a WSC

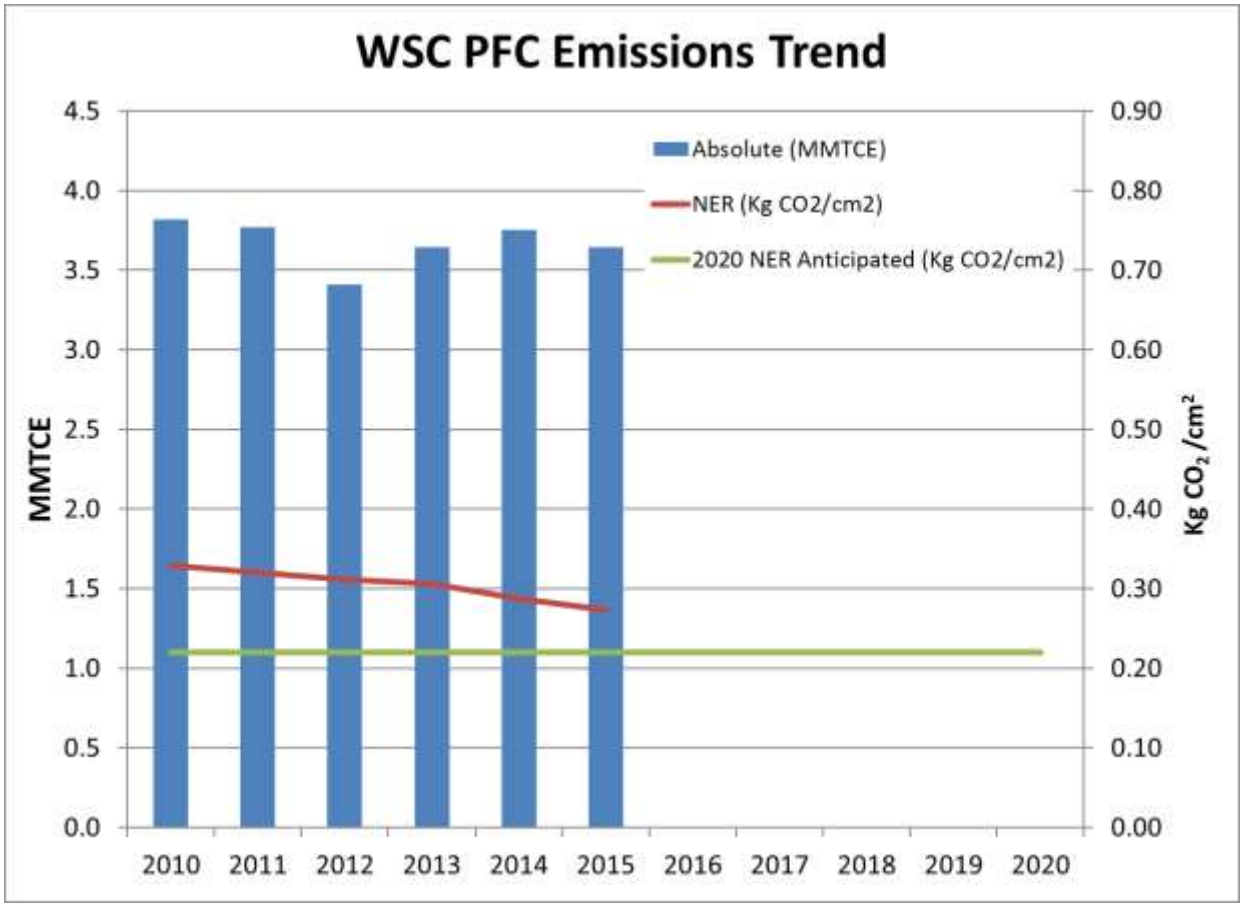
association) in reporting of emissions and the implementation of best practices for new fabs.

- A NER based measurement in kilograms of carbon equivalents per area of silicon wafers processed (KgCO2e/cm2) that will be a single WSC goal at the global level.

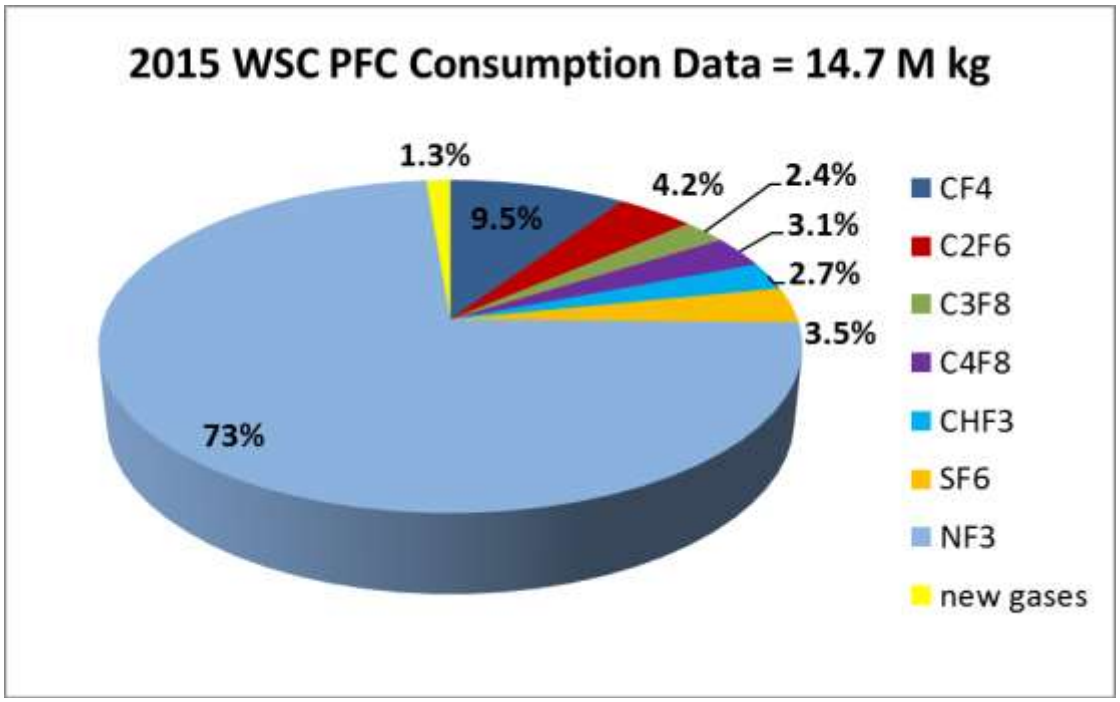
The WSC agreed to report its progress on this new voluntary agreement on an annual basis. This external reporting will provide aggregated results of the absolute PFC consumption and emissions alongside each other and NER trends. These figures represent combined emissions for the six WSC regional associations, in their own regions and in the "Rest of World" fabs described above. In addition, to improve transparency, the WSC has made its Best Practices for PFC Reduction document available previously on the WSC website and the WSC reports the individual gas breakdowns. The 2015 report also includes the reporting of newly used gases CH_2F_2, C_4F_6, C_5F_8 and C_4F_8O.

The fifth year results are as follows: in 2015, combined WSC absolute emissions of PFCs decreased by 4.5% compared to 2010, to 3.65 MMTCE in 2015. The NER decreased by 17.1% compared to 2010 to 0.27KgCO2e/cm2 in 2015. Please see the graph below which compares these results to 0.22Kg/cm2 equivalent to a 30% NER reduction anticipated by 2020.

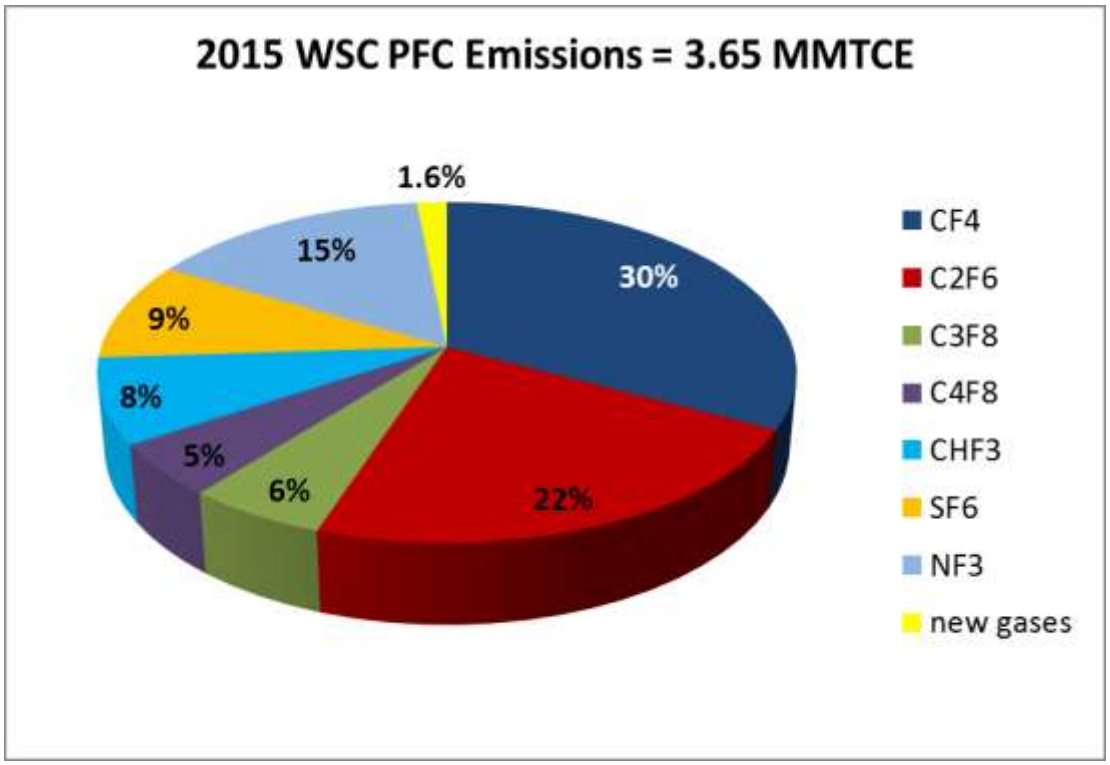
Results of WSC PFC Emission Trends



2015 WSC PFC Consumption and Emissions Data



(New gases include CH_2F_2, C_4F_6, C_5F_8 and C_4F_8O)



B. Resource Conservation

Semiconductor devices contribute to improved resource conservation in our world. Energy efficiency enabling semiconductors play a key role in the more efficient transmission, distribution and consumption of energy which also largely contributes to world's carbon emission reduction, contributing to humankind's achieving the United Nation's carbon reduction goal under the global climate change risk mitigation.

Traditional forms of energy and renewable energy sources will not be sufficient alone to meet the world's future energy needs. Consuming energy more efficiently is therefore of paramount importance, and semiconductor devices help achieve this goal. Semiconductor devices enable a more efficient use of energy in all aspects of our daily lives: in the home, office or on the road; in industrial manufacturing; in public infrastructure; and in public transport.

The semiconductor sector itself is not a large natural resource consumer amongst global industries. However the WSC's members continue to focus activity on reducing the use of resources involved in the device manufacturing processes in order to reduce its direct impacts to the local and global environment. The normalized 2015 consumption (per cm2 of silicon wafers processed) of water used in manufacturing was reduced by 49%, and waste generated was reduced by 25% compared to 2001. Normalized energy consumption was also significantly reduced. The WSC will continue to pursue environmental conservation programs in these areas and continue to share examples of improvement practices.

The WSC emphasizes that process and facility equipment suppliers can assist users in ensuring that energy saving potentials are a key element in their design of leading edge equipment. To reduce carbon emissions, the collaboration between equipment users and suppliers should also target significant energy saving from firmware/software improvements of existing as well as new equipment/tools. WSC requests that suppliers evaluate cost

effective energy improvements to existing tool equipment sets and establish energy optimization goals as part of new equipment design, and make target-driven proposal to tool users actively.

C. Chemical Management

The WSC notes that Governments/Authorities around the world are considering restrictions on chemicals that may be essential to the semiconductor manufacturing process. These chemicals, such as perfluorinated chemicals, are used in semiconductor manufacturing because they possess properties and functionality that are critical to the complex process of manufacturing advanced semiconductors. There are typically no known "drop-in" alternatives to these chemicals that meet the industry's functional and performance requirements. Some of these chemicals of concern may be used in other industries in higher quantities and result in greater releases to the environment as compared with the semiconductor industry.

The semiconductor industry is constantly seeking ways to minimize any adverse impact surrounding our use of these chemicals. These chemicals are generally used in small quantities and under highly controlled conditions. In some instances, and where necessary and appropriate, our industry has successfully phased out the use of specific chemicals. For example, the global industry has successfully worked with our suppliers to phase out non-critical uses of perfluorooctanyl sulfonates (PFOS), and has minimized the continued use and releases of remaining essential uses of this chemical. The semiconductor industry will continue to work with Governments/Authorities, the scientific community, and others in ensuring that our use and management of chemicals safeguards human health and the environment.

Governments/Authorities are also considering restrictions on chemical substances contained in "articles." The term "articles" in these regulations generally refers to a broad range of manufactured products,

including finished semiconductor devices and the manufacturing equipment (known in our industry as "tools") used in the semiconductor manufacturing process. The regulation of articles presents different issues than the regulation of chemicals used in manufacturing processes, since the chemicals contained in articles are (a) not intended to be released from the finished product under normal conditions of use, (b) traded globally, and regulations in one country can apply to devices made in another country, and (c) incorporated into a product at various steps throughout the global supply chain. Accordingly, these regulations have the potential to have an adverse impact on global commerce of semiconductor devices and manufacturing tools that are critical to our industry.

The ability of the semiconductor industry to continue using critical chemicals is essential to the industry's ability to continue to innovate and produce critical products. **The WSC recommends that Governments/Authorities proceed carefully in regulating chemicals that are essential to the semiconductor industry and may not be suitable for substitution. Where restrictions placed on a particular chemical are necessary to address health and environmental concerns, the WSC recommends that Governments/Authorities take into account the specialized conditions of use of these chemicals in the semiconductor industry and our supply chain, the protective management practices in the semiconductor industry, the small quantity of chemicals used in manufacturing processes or contained in articles, and the fact that these chemicals are not intended to be released from the finished product under normal conditions of use. Where it is necessary to regulate chemicals used by the semiconductor industry, the WSC recommends that any regulations provide the industry with sufficient time to evaluate our uses of chemicals and to identify, qualify, and transition to alternative chemicals that satisfy our functional and performance requirements. The WSC recommends that Governments/Authorities provide appropriate exemptions to allow continuation of critical uses of these chemicals in**

processes and articles. Finally, the WSC recommends that chemical substances in articles should be regulated as a last resort, only when the risks associated with the chemical cannot be addressed otherwise.

Conflict Minerals

The WSC adopted at its 17th meeting in May 2013 a Conflict-Free Supply Chain Policy in order to support the global progress in addressing the sourcing of conflict minerals from conflict zones, such as the Democratic Republic of the Congo (DRC) and surrounding countries.[1]

The global semiconductor industry is a recognized leader in addressing conflict minerals. The semiconductor industry has led the development of compliance tools (such as the OECD due diligence guidance framework) that have been readily adopted by other key industry sectors and has implemented state of the art programs to track progress across our entire supply chain.

The WSC continues to makes progress towards a Conflict-Free Supply Chain Policy. In this respect, the WSC has been promoting the use of industry-standard tools, control-points, methods and standards among WSC member associations on this issue to facilitate progress. The WSC also welcomes the certification of more global smelters and refiners through the Conflict-Free Smelter Program (CFSP) as a positive development.

The WSC recommends that if GAMS members are considering new legislation of the type used to regulate the use of conflict minerals, the legislation be globally aligned, utilize existing global tools (such as the OECD due diligence guidance framework) and existing successful industry initiatives (such as Conflict Free Sourcing Initiative) and be based on voluntary principles.

[1] "Surrounding countries" as defined under the Dodd-Frank Wall Street Reform Act 2012 (Central Africa Republic, South Sudan, Zambia, Angola, The Republic of the Congo, Tanzania, Burundi, Rwanda, Uganda).

Effective Protection of Intellectual Property

A. Trade Secrets

The WSC supports national legislative initiatives to improve the protection of trade secrets, for example:

- the draft EU Trade Secrets Directive,
- recent opinions issued by China's State Council's on improvement of laws for trade secret protection,
- the Trade Secrets Act in the U.S., signed on May 11, 2016, that establishes a civil cause of action for the misappropriation of trade secrets,
- recent initiatives in Chinese Taipei to reform trade secret legislation including enhanced evidence-gathering.

These initiatives are designed to strengthen trade secret protection, the objective referred to in "Core Elements for Trade Secret Protection Legislation" in 2015 WSC Joint Statement (Annex 1).

The WSC therefore calls on government and authorities to support these Core Elements when making the national trade secret protection legislation, and any related pending legislation or legislative reforms or amendments.

B. Patent Quality

The quality of patents is crucial to the continued growth and innovation of the semiconductor industry. The WSC recognizes the importance of improving patent quality and has been working with WIPO and the patent offices of GAMS members to encourage the collection and dissemination of standardized statistical metrics bearing on patent quality.

The WSC welcomes GAMS' statement at its 2015 meeting supporting cooperation between the WSC and WIPO on patent quality, and suggesting that member patent offices consider annually sharing with WIPO requested patent quality metrics in a coordinated fashion.

The WSC is encouraged by the continuing cooperation with WIPO and member patent offices on the issue of patent quality, and by the importance that WIPO has placed on patent quality and the WSC initiative. The WSC also is encouraged by recent progress toward collecting patent quality data at WIPO, including through WIPO's annual questionnaire to patent offices, and looks forward to further progress.

The WSC would welcome the GAMS' continuing support for cooperation between the WSC and WIPO on patent quality, and its support for progress with member patent offices in collecting and disseminating patent quality metrics in a coordinated fashion.

C. Foreign Filing License (FFL) Requirements

A number of countries have requirements under which an applicant needs to obtain permission before filing a patent application abroad. Permission either is granted on request or can be assumed if within a certain time from filing of a national patent application "no objection" is raised. The requirement allows a government to restrict disclosure abroad of the invention in certain cases. Some governments have such requirements for every invention, others only for inventions relating to national security and some governments have no such requirements.

These regulations have a growing impact in the handling patent applications as development teams within companies are becoming more international. Groups in different countries collaborate in the same project and exchange information on a day-to-day basis. The requirements are especially burdensome if there are multiple inventors based in different countries or if the country where the invention is made is not among the

countries, where a patent is desired. To illustrate the problem that this creates, if a single invention is conceived by two inventors working in two different countries that both have FFL requirements, in which country should the company file for a patent? Filing in either country would violate the law of the other unless a waiver is obtained from one of the Patent Offices. Further complicating matters, a company's patent attorneys may not be in the same country as the inventors, so sending the invention disclosure from the inventor's country to a patent attorney in another country, e.g. where the law firm office or the company headquarter is located, may be problematic in some circumstances.

In addition, in case FFL procedures are required, patent filings and/or commercial exploitation is delayed, while the costs for the inventor/applicant increases. In our industry, the large majority of inventions are of a type that will not raise national security concerns.

The WSC recommends that the GAMS consider the following:

- **Countries/regions that do not have FFL requirements are encouraged to maintain existing policy.**
- **For countries/regions with FFL requirements, the applicant should be required to obtain permission to file patent applications abroad only in the few cases where national security interests are at risk.**
    - **Governments/authorities of countries/regions that have FFL requirements should make exhaustive lists of those technologies where a patent application requires permission for foreign filing for national security reasons, the lists being clear, unambiguous and specific enough for inventors and applicants to determine whether a patent application requires permission for foreign filing. Each government/authority may decide, e.g. based on a proposal from their respective POs, on a list of technical areas which still require an FFL.**

- **To the extent possible, countries/regions should seek to harmonize their list of technologies for which FFLs would be required. In cases where there are joint inventors from two or more countries in which at least two of the countries/regions require an FFL, the country(ies)/region(s) in which the patent application is not filed should exempt the patent applicant from the requirement to obtain an FFL in that (those) country (ies)/region(s), enabling the applicant to avoid any and all sanctions related to failure to obtain the FFL.**
- **For technologies that are not on the list of technologies for which FFLs would be required, the requirement to obtain permission or to file a national patent application before filing a patent application in a different country or at an international organization should be abolished.**

D. Abusive Patent Litigation (NPEs/PAEs)

WSC recognizes that abusive patent litigation seriously undermines innovation by redirecting research expenditures and other resources to unnecessary litigation expenses, and by making it more difficult to bring products to market. Unfortunately, existing procedures to combat abusive litigation practices so far have failed to achieve their objective in curbing such abusive conduct. Thus, the WSC supports the continued focus on abusive patent litigation by the courts, regulatory bodies, legislative bodies, and patent offices around the world.

The WSC encourages GAMS to support and implement the adoption of appropriate and balanced reforms as embodied in the WSC's recommendations contained in Annex 2 of the WSC's 2015 Joint Statement. Legislative proposals pending in certain jurisdictions address many of the specific WSC recommendations to GAMS in this area. The

WSC urges GAMS to move forward promptly to implement the needed reforms.

Fighting the Proliferation of Semiconductor Counterfeiting

As noted in past WSC statements, the proliferation of counterfeit semiconductor products creates serious risks to public safety and health and to critical infrastructure. Governments/authorities and industry must each do their part to reduce and eliminate counterfeits from the global semiconductor market.

The WSC reiterates its commitment to intensify anti-counterfeiting work activities through its Anti-Counterfeiting Task Force. This Task Force has shared examples of anti-counterfeiting capacity building measures that could be employed across the semiconductor industry; has circulated widely the WSC's White Paper *"Winning the Battle against Counterfeit Semiconductor Products"* that describes the risks from counterfeit products; distributed a semiconductor anti-counterfeiting poster for awareness raising at exhibitions and seminars; and has underlined the importance of purchasing from Original Component Manufacturer (OCM) or directly from the OCM's Authorized Distributors/Resellers, where sureness of chain of custody is most likely to prevent unintended purchases of counterfeit semiconductors. The WSC Anti-Counterfeiting Task Force continues with these efforts.

To increase awareness of the public health, safety and other performance risks caused by counterfeits at international public conferences, the WSC supports for the World Anti-Counterfeiting Day initiative on 8th June 2016 that will be utilized to highlight the problem of counterfeiting. Please refer to Annex 1.

The WSC appreciates the GAMS' reconfirmation, at its 2015 meeting, to the GAMS' commitment to fighting semiconductor counterfeiting and to work with their customs and law enforcement authorities' agencies to

intensify the implementation of semiconductor anti-counterfeiting enforcement measures, including information-sharing activities. The WSC appreciates the GAMS continued reporting at GAMS meetings on the authorities' efforts to implement appropriate measures (including at domestic, bilateral and multilateral levels) in coordination with industry to stop counterfeits at the borders and appropriately prosecute those who make and distribute counterfeits.

Semiconductors are the "brains" inside critically-important electronic systems, including healthcare and medical equipment, electric power grids, communications systems, automotive braking and airbag systems, and aviation systems. Because they control the performance of these and other vital electronics, counterfeit semiconductor components pose major risks to the health, safety, and security of people worldwide.

With regards to domestic enforcement measures, the WSC calls attention to, and reiterates its recommendations in its 2007 and 2008 Joint Statements that stated that "In those jurisdictions where criminal enforcement actions are only taken when the amount of counterfeit goods are above a certain threshold amount, governments should substantially lower the criminal threshold for semiconductors and other intermediate goods where the damage to downstream industries is high." For semiconductors, such threshold criteria fail to recognize that an inexpensive counterfeit semiconductor may cause an expensive piece of critical infrastructure equipment to fail, or may result in health or safety harms such as fires or a malfunction in an automobile airbag.

The WSC recommends that GAMS members continue their work to stop counterfeits at the borders and to vigorously prosecute perpetrators who make and distribute counterfeits. The WSC pledges its continued cooperation with GAMS customs and enforcement agencies in these efforts. The WSC also recommends that GAMS members review the criminal procedures and policies with their relevant authorities to ensure

that those making or selling counterfeit semiconductors are prevented from potentially causing serious damage to public health and safety and to critical infrastructure. WSC Anti-Counterfeiting Task Force continues with these efforts, and will study and develop specific recommendations on possible improvements to national enforcement policies.

Encryption Certification & Licensing Regulations

The WSC strongly supports the GAMS commitment to observe the WSC Encryption Principles and recommendations, which emphasize transparency and non-discrimination for commercial encryption products, need for global convergence in international standards and certification practices, adoption of consensus based international standards and best practices, and open procedures and rules. Transparent, non-discriminatory and open international standards are important for security technologies because, in addition to ensuring interoperability, their robustness has been tested and confirmed.

The WSC greatly appreciates the deepened dialogue on encryption among GAMS trade authorities, information security experts, and industry experts. The two full-day GAMS seminars on encryption held in 2014 and 2015 have produced fruitful discussions on global convergence of encryption approaches in line with the above WSC principles. These two seminars have promoted a better understanding of existing regulatory frameworks in the member's jurisdictions, difficulties faced in certain regions, the importance and benefits of global convergence toward regulatory, licensing and certification approaches that align with WSC best practices, and the need for collaborative and international approaches when developing cryptography, for security, innovation, and mutual trust.

The WSC is furthermore grateful to GAMS members for their commitment and efforts to reflect aspects of the WSC principles in their respective systems as well as in the work of relevant international

organizations. With rapid technology development – for example in the Internet of Things, medical devices, cloud computing, big data, connected cars, and connected homes - information technology is becoming increasingly present in all areas of our daily life.

As a result, the demand for information security – of which encryption is a key element – is growing, in order to preserve privacy, protect data from theft, unauthorized access or misuse, and in order to protect information and communication technology in important infrastructures.

Consequently, in order to avoid a negative impact on the industry's competitiveness, prevent unnecessary restrictions to trade, ensure the worldwide availability of the most robust security solutions, and support the widespread diffusion of emerging technologies containing encryption, the free flow of commercial encryption products must be ensured.

The WSC therefore strongly recommends that GAMS members continue their dialogue on information security. This dialogue should be aimed at the following:

- **Ensuring that the WSC Encryption principles are observed by all GAMS members.**
- **Achieving agreement on the ways to reach convergence on international standards and certifications schemes among different countries or regions.**
- **Ensuring that the level of security is in accordance with the applications' security needs.**
- **Ensuring that there is no discrimination in market access of encryption products. and that any regulation or requirement is applied on a non-discriminatory basis.**

- **Ensuring transparency in the development of any necessary regulation or new proposed rules, including timely and meaningful consultation of stakeholders.**

The WSC also encourages GAMS to discuss concerns related to regulatory practices worldwide at the 2016 GAMS meeting.

Customs and Tariffs

A. Multi-Component ICs (MCOs) and ITA

The WSC applauds the successful conclusion of the Information Technology Agreement 's (ITA) expansion as it ensures tariff-free treatment for all semiconductor products, including advanced semiconductor products such as multi-component ICs (MCOs) as well as multi-chip ICs (MCPs), a product that was the subject of the 2006 GAMS "Agreement on Duty Free Treatment of Multi-chip Integrated Circuits." The WSC also applauds the ITA expansion coverage of semiconductor manufacturing equipment and a wide array of products whose functionality depends on semiconductors, including GPS navigation systems, telecommunications satellites, touch screens, and some state-of-the-art medical products.

The WSC also highly appreciates the WCO decision to complete the classification of MCOs under HS heading 8542, with the approval in May 2016, of the corresponding HS explanatory notes. The WSC is confident that with the agreed explanatory notes, which largely take into account the inputs by the WSC, all significant MCOs are effectively classified under 8542 starting on January 1st 2017. The new rules also should remove legal uncertainties and administrative burden in the classification of these products.

The WSC has called for classification of MCOs under HS heading 8542 and for the elimination of tariffs on MCOs since 2007, and greatly

appreciates the work by the GAMS, their Customs officials, and the other ITA Parties, to hasten the day when consumers can enjoy the benefits of these products without the imposition of costly tariffs. The WSC commends the majority of ITA Expansion Parties for committing to eliminate tariffs on MCOs immediately upon the Agreement entering into force on July 1, 2016, without multi-year staging.

The WSC calls on GAMS members and all ITA Parties to commence implementation of their ITA expansion commitments by July 1 as agreed, and to encourage other WTO members to join the ITA expansion agreement. The WSC also encourages Parties to autonomously eliminate tariffs on MCOs prior to January 1, 2017, when MCOs will move from a variety of headings to the heading for integrated circuits (HS 8542) under the World Customs Organizations' Harmonized System (HS) update.

ITA Parties may find trade facilitation benefits in addition to economic benefits to their downstream manufacturers by eliminating MCO tariffs on January 1, 2017, as transferring a variety of MCO subheadings to account for different tariff rates for MCOs that are currently under different headings will be confusing and burdensome for customs authorities, exporters, and importers.

WSC also urges all GAMS members to promptly put into place the appropriate domestic and WTO processes and to prepare for the review of the product coverage of the ITA before January 2018 as called for in the WTO Ministerial Declaration of December 16, 2015 in Nairobi in order to keep pace with technological developments. [WT/MIN/(15) 25, Para. 11.]

B. Semiconductor-Based Transducers

The WSC appreciates the GAMS' support on an amendment of HS heading 8541 with a view to including semiconductor-based transducers in the HS 2022 revision.

The WSC also applauds the initiative by the European Commission to file a first draft proposal at the 49th session of the review sub-committee meeting of the WCO in November 2015.

The six WSC member associations have reached consensus on the amendment of HS heading 8541 by semiconductor-based transducers, which are for the purpose of this definition semiconductor-based sensors, semiconductor-based actuators, semiconductor-based resonators and semiconductor-based oscillators. Please refer to Annex 2.

The WSC calls on GAMS to support this proposal and cooperate with its customs authorities to achieve the implementation of this amendment to HS heading 8541 within the HS2022 review.

C. Trade Facilitation

C.1 WTO Agreement on Trade Facilitation

The WSC extends appreciation to all GAMS members for completing domestic procedures to ratify the WTO Trade Facilitation Agreement and filing instruments of acceptance with the WTO. The agreement carries the promise of dramatically lowering trade costs by expediting import, export and in-country transit; removing bureaucratic red tape and corruption; making border processes more efficient and transparent; and focusing on technological advances to achieve such objectives.

The WSC is committed to advocating for the TFA, and has engaged in outreach to partner organizations in regions that have not yet filed acceptance to encourage swift ratification. **The WSC calls on GAMS to urge remaining members of the WTO to swiftly complete their domestic procedures and file acceptances with the WTO so that the two-thirds threshold for TFA entry into force is achieved this year. Further, the WSC encourages GAMS to work energetically to implement the agreement's specific customs and trade provisions across the WTO membership, while**

ensuring it yields maximum trade benefits in the most effective and timely manner possible.

C.2 Trusted Traders

In recent years, Governments/Authorities have adopted rules aiming at improving cargo and supply-chain security with focus on system based approach aiming at reducing the number of cases where threat to security is expected. The establishment of trusted traders programs such as the Authorised Economic Operator (AEO) programs is an example of this trend.

As semiconductor supply chains have grown more complex due to globalization, semiconductor companies worldwide have been investing in complying with the above security policies and thus deployed significant efforts to obtain AEO status in the relevant countries.

To further facilitate import-export operations for trusted traders, the WSC believes that it is crucial to establish a core set of internationally accepted and tangible trade facilitation benefits that could be provided to AEOs under all relevant national programs. Such benefits should be transparent and meaningful to the extent that they justify the additional costs sustained by economic operators in meeting the requirements prescribed by trusted traders programs, and that they also bring trusted traders real improvements and facilitation gains, above and beyond the normal procedures enjoyed by non-AEOs, also above and beyond the benefits foreseen by the SAFE framework of the WCO. International trade facilitation programs also should provide for a level playing field for all trusted traders.

The WSC encourages GAMS to work together with their Customs Authorities to strengthen Authorized Economic Operator (AEO) programs by granting enhanced benefits to trusted traders, for example:

- **Reduction of required data for customs transactions, including an option for trusted traders to use a reduced standard data-set for security risk assessment purposes**

- **Worldwide level playing field for trusted traders, i.e. same applied conditions and benefits**

- **Enhanced use of self-assessments and simplification of [customs] declarations - to be issued on a supplementary basis or monthly basis**

- **Less physical inspections for trusted traders and less transaction-based customs audits for AEOs towards system-based audits. Focus should be on the implementation of appropriate organizational measures, processes and internal compliance programs.**

- **More consistent and simple mutual recognition agreements (MRAs). All GAMS regions have established trusted traders' programs and are seeking to formalize AEO MRAs with other Customs administrations. However, not all GAMS regions have concluded AEO MRAs with the all other respective GAMS parties. Achieving a complete mutual recognition of the AEO status among all GAMS regions would greatly facilitate trade for the global semiconductor industry.**

- **Aligning global customs security approaches for example in the field of national civil aviation security programs, with particular reference to the harmonization of the requirements economic operators need to meet under the different programs (known consignor, AEO, etc.). The goal should be global harmonization of the various programs as well as mutual recognition among the different programs in order to avoid duplications of efforts by trusted traders.**

The WSC continues to study the trusted traders programs in GAMS regions in the above areas, and endeavors to provide, in October 2016,

GAMS with more detailed recommendations towards global best practices to enhance benefits for trusted semiconductor traders.

D. Harmonization of Customs Classifications for Semiconductors

The WSC remains committed to working with GAMS customs agencies and the World Customs Organization to achieve harmonization of classification of identical semiconductor products that are classified differently in different regions.

In 2015, the WSC provided the WCO with the WSC Study of Relevant HS Subheadings, identifying cases of identical semiconductor products classified differently in different countries and regions. Please refer to Annex 3. In January 2016, the WSC updated the Study further to a WCO request for additional information. The updated Study includes detailed information for four of the cases identified. WSC received a response that since the WCO can only address classification disputes, the WCO is not in a position to address this issue from a legal perspective.

The WSC recommends that the four products identified in the updated Study should be treated as semiconductor products, namely classified under HS heading 8541 or 8542.

Given the size of the semiconductor industry, the volume of trade in the industry, and the complex trade patterns resulting from the global supply chain, aligning the worldwide harmonization of semiconductors will greatly benefit semiconductor companies and customers by reducing administrative burdens and compliance risks, and lowering costs.

Acknowledging that harmonization can be attained in different ways for the different classes of cases presented, **the WSC recommends that GAMS members encourage their customs authorities to address, as appropriate in the WCO or in bilateral or multilateral dialogues with Customs authorities , the different HS classifications for semiconductor products identified by the WSC.**

This should be done with appropriate emphasis to Chapter 85, Note 8, of the HS which states, among others, that "For the classification of the articles defined in this note, headings 8541 and 8542 shall take precedence over any other heading in the Nomenclature, except in the case of heading 8523, which might cover them by reference to, in particular, their function."

The WSC stands ready to present and explain the cases of different HS classification of identical semiconductor products directly to the WCO or to the relevant Customs administrations.

Regional Support Programs & Regional Stimulus

Given the vital role of the semiconductor industry to all regions' economic growth and innovation, combined with the immense technological challenges and rising costs facing our industry, the WSC encourages and welcomes market-based government support which fosters semiconductor industry progress and is consistent with WTO rules and obligations.

WSC confirms its view that government actions and assistance in the semiconductor sector should be transparent, open and avoid adoption of protectionist, discriminatory or trade-distorting measures.

The WSC welcomes the GAMS' invitation to further study and exchange information on relevant regional support programs at a workshop at the 2016 GAMS meeting. **The WSC hereby presents to GAMS its proposed workshop agenda. Please refer to Annex 4. The WSC requests that GAMS members identify appropriate officials or individuals responsible for or familiar with government support programs in their region to participate in this workshop.**

Growth Initiatives

The WSC is committed to enhancing global health, safety and energy efficiency by supporting growth in new and emerging semiconductor-enabled areas such as automotive, medical technology, energy efficiency, and Internet of Things. Societal benefits from semiconductor technology will continue to grow along with the associated demand for network and cloud infrastructure, wireless connectivity, hardware-level security, sensing, memory and more.

However, growth in these sectors faces numerous business, technical, and policy challenges. These challenges can only be overcome if all stakeholders – industry, government and academia – work together on R&D to solve fundamental technology challenges, ensure interoperability, and establish sound public policies. Governments can help enable widespread adoption of technology in the above sectors by:

1. Ensuring interoperability by working with industry, and academia to create common technology standards, translation/aggregation platforms and protocols for sharing between systems.

2. Adopting technology- neutral policies.

3. Having regulators work with industries such as automotive and health care to encourage investment in and adoption of new digital processes/technologies in industries.

4. Supporting R&D to overcome technical challenges, especially in the areas of low-power computing, energy efficient sensing, security, storage, and wireless connectivity.

5. Supporting policies that open markets and streamline trans-border data flow, including eliminating tariffs on environmental goods.

The WSC commends the 2015 GAMS agreement to work with Environmental Goods Agreement (EGA) negotiators to conclude an EGA

that covers semiconductor-enabled technologies that promote energy efficiency. LED and CFL lighting, solar cells, process control equipment, efficient power supplies, variable frequency drives, electric motors, and inverter motor control technology are examples of semiconductor technology used in environmental goods. **The WSC recommends that the GAMS reaffirms its commitment at the 2016 GAMS meeting, and that GAMS members work to swiftly conclude the EGA.** The UN Environment Programme observation that global electricity consumption is expected to grow 60 percent by 2030, primarily due to the accelerated use of inefficient appliances and equipment such as room air conditioners and domestic refrigerators in developing countries, and that shifting markets to efficient air conditioners, domestic refrigerators and electric motors can reduce global energy consumption by 10% annually, serves to underscore the importance of inclusion of semiconductor enabled technologies in the EGA.

In past WSC Joint Statements, the WSC has also made recommendations for growth initiatives in the automotive sector, including starting a dialog with international organizations as a means to inform regulators about how semiconductor technology can improve automotive safety. In this regards, the WSC takes note of United Nation General Assembly Resolution 70/260, "Improving Global Road Safety" (15 April 2016) which reaffirms the goal to half, by 2020, the number of global deaths and injuries from road traffic accidents. New semiconductor-enabled technologies, included Advanced Driver Assist Systems, Automatic Emergency Braking Systems, Pedestrian and Cyclist Detection systems, Adaptive Front Headlights, and intelligent transportation systems can significantly reduce automobile injuries and fatalities and contribute to the UN goal. **The WSC recommends that the GAMS and its members work with their representatives in the Global New Car Assessment Program to share information with other Global NCAP members about the rapid advances in semiconductor enabled automotive safety technologies and encourage, as appropriate to their markets, consideration of these**

technologies' inclusion in programs that inform new car buyers about safety features.

Semiconductor technology enables medical devices such as medical imaging, heart pacemakers, and hearing aids, and further technology advances will continue to make these devices better and more affordable. Furthermore, semiconductor technologies will create new medical and health applications to address both traditional medical needs and the emerging challenges of an aging population. The WSC will provide the GAMS at the next GAMS meeting with a special market report on medical technologies, including wearables and healthcare services.

The Internet of Things (IoT), coupled with an improved ability to analyze large amounts of data in the cloud, will provide unprecedented benefits throughout the global economy and society. IoT will make manufacturing and services more efficient, widen educational opportunities, and create new business models such as the shared economy, to name but a few. Many of the policy recommendations elsewhere in the WSC Joint Statement, such as those related to encryption, the protection of intellectual property, and the immediate elimination of tariffs on MCOs, will hasten society's realization of the benefits of the IoT.

OECD-- Base Erosion and Profit Shifting (BEPS)

The WSC remains concerned that data from country-by-country (CBC) reports, as well as the local and master files may be applied as a basis for taxpayer adjustments

The WSC calls on GAMS to implement CBC reporting requirements that only require information needed for countries to assess tax risk, consistent with the transactional arms length standard; and to refrain from using CBC reports, as well as local and master files, as the basis for assessing deficiencies based on formulary apportionment.

The WSC is concerned that as different jurisdictions implement CBC reporting on different timelines, companies may face conflicting deadlines, duplicative reporting requirements and, most importantly, the potential loss of treaty protection for information provided

It is important for parent companies to have a process for filing CBC reports with their home countries. This would allow taxpayers to rely on information-sharing provisions of the home country treaties.

The WSC calls on the GAMS to refrain from seeking CBC report information directly from companies if the parent company's home country has not yet implemented CBC reporting requirements.

The WSC is concerned that public release of CBC reports, or additional requirements for companies to release data from CBC reports, will result in the inappropriate release of confidential taxpayer information and undermine the protections for such information provided by tax treaties and other exchange mechanisms.

The WSC is also concerned that public release of CBC report information would create a precedent to deny privacy protection to confidential taxpayer data. Such a precedent may then be applied to deny privacy protection to the master and local files, which may contain very sensitive competitive information.

The WSC therefore calls on GAMS to protect the confidentiality of CBC reports, as well as the local and master files, and to limit requests to such information that is necessary to conduct a tax risk assessment.

The WSC asks GAMS to take note of the potential threat to confidentiality posed by requirements to publicly disclose sensitive information from CBC reports, including the harmful precedent this may establish.

Approval of Joint Statement and Approval of Recommendations to GAMS

The results of today's meeting will be submitted by representatives of WSC members to their respective governments/authorities for consideration at the annual meeting of WSC representatives with the Governments/Authorities Meeting on Semiconductors (GAMS) to be held in October 2016 in Berlin, Germany.

Next Meeting

The next meeting of the WSC will be hosted by the Semiconductor Industry Association in Japan, and will take place in Kyoto, Japan in May 2017.

Key Documents and WSC Website:

All key documents related to the WSC can be found on the WSC website, located at:
http://www.semiconductorcouncil.org

Information on WSC member associations can be found on the following websites:
Semiconductor Industry Association in China:
http://www.csia.net.cn
Semiconductor Industry Association in Chinese Taipei:
http://www.tsia.org.tw
Semiconductor Industry Association in Europe:
http://www.eusemiconductors.eu
Semiconductor Industry Association in Japan:
http://semicon.jeita.or.jp/en/
Semiconductor Industry Association in Korea:
http://www.ksia.or.kr
Semiconductor Industry Association in the US:
http://www.semiconductors.org

Annexes:

1. 2016 World Anti-Counterfeiting Day - WSC Press Release
2. Amendment to HS 8541 on Definition of Semiconductor-Based Transducers
3. Updated WSC Study on Semiconductor HS Classification
4. Proposed Agenda for GAMS Regional Support Programs Workshop

Annex 1

June 8 2016

WSC supports World Anti-counterfeiting Day

The World Semiconductor Council (WSC) supports the Global Anti-Counterfeiting Group's celebrations of World Anti-Counterfeiting (WAC) day on June 8th 2016. World Anti-Counterfeiting Day is now in its eighteenth year and was established by the GACG to enable the organization of events under the umbrella of an international campaign which could focus on the particular problems of counterfeiting and piracy in the countries or regions involved. The WSC supports the WAC events and believes they are a great way to highlight the common cause of industry sectors in the fight against counterfeiting alongside the crucial role played by national enforcement authorities.

An event to mark the day will be held in at the GACG headquarters in Paris and will include presentations of the 2016 Global Anti-Counterfeiting Awards. In the United Kingdom of Great Britain and Northern Ireland (UK) the day is being marked by an event in coordination with the UK's Border Force and takes place at Customs House, Heathrow airport.

The World Semiconductor Council (WSC) has established an Anti-Counterfeiting Task Force amongst the semiconductor industry associations of China, Chinese Taipei, Europe, Japan, Korea, USA and to promote anti-counterfeiting activities, including training, raising awareness, and encouraging purchases from authorized sources. The WSC works closely with governments and authorities on policies and regulations, and encourages domestic, bilateral and multilateral countermeasures and enforcement activities. Such enhanced anti-counterfeiting cooperation activities at the industry level alongside government agencies, customs and law enforcement agencies is instrumental to identify and stop parties involved in manufacturing or trafficking in counterfeit goods.

About WSC

The World Semiconductor Council is a cooperative body of the world's leading semiconductor industry associations – consisting of the Semiconductor Industry Associations in China, Chinese Taipei, Europe, Japan, Korea and the United States- that meets annually to address issues of global concern to the semiconductor industry. The WSC also meets annually with the governments and authorities of the six regions to convey industry recommendations. The WSC is dedicated to the principle that markets should be open and competitive and works to encourage policies and regulations that fuel innovation, propel business and drive international competition in order to maintain a thriving global semiconductor industry.

More information on the WSC is available at http://www.semiconductorcouncil.org

For further information, please contact:

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WSC Proposal to amend HS Heading 8541 in HS 2022
May 26th, 2016, Seoul, Korea

HS Heading 8541

8541 Semiconductor devices (e.g. diodes, transistors; semiconductor-based transducers; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; and similar semiconductor devices; mounted piezoelectric crystals).

Notes to HS Chapter 85

"Semiconductor-based transducers" are, for the purpose of this definition, semiconductor-based sensors, semiconductor-based actuators, semiconductor-based resonators and semiconductor-based oscillators, which are types of discrete semiconductor-based devices, which perform an intrinsic function, which are able to convert any kind of physical or chemical phenomena or an action into an electrical signal or an electrical signal into any type of physical phenomenon or an action. All the elements in semiconductor-based transducers are indivisibly combined, and may also include necessary materials indivisibly attached, that enable their construction or function.

The following expressions mean:

- "Semiconductor-based" means built or manufactured on a semiconductor substrate or made of semiconductor materials, manufactured by semiconductor technology, in which the semiconductor substrate or material plays a critical and unreplaceable role of transducer function and performance, and the operation of which is based on semiconductor properties including physical, electrical, chemical and optical properties.

- "Physical or chemical phenomena" relate to real world phenomena, such as pressure, acoustic waves, acceleration, vibration, movement, orientation, strain, magnetic field strength, electric field strength, light, radioactivity, humidity, flow, chemicals concentration, etc.

a) "Semiconductor-based sensor" is a type of s/c device, which consists of micro-sized or smaller electronic structures or micro-sized or smaller electromechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of detecting physical or chemical quantities and converting these into electric signals caused by resulting variations in electric properties or displacement of a mechanical structure.

b) "Semiconductor-based actuator" is a type of s/c device, which consists of micro-sized or smaller electronic structures or micro-sized or smaller electromechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of converting electric signals into physical movement.

c) “Semiconductor-based resonator” is a type of s/c device, which consists of micro-sized or smaller electronic structures or micro-sized or smaller electromechanical structures that are created in the mass or on the surface of a semiconductor and have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures in response to an external input.

d) “Semiconductor-based oscillator” is a type of s/c device, which consist of micro-sized or smaller electronic structures or micro-sized or smaller electromechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures.”

Amendment to HS Explanatory Notes

Add the following paragraphs to the HS Explanatory notes:

“The materials used in semiconductor-based transducers should be those that are currently widely used, which refer to Silicon (Si), Germanium (Ge), Carbon (C), Silicon Germanium (SiGe), Silicon Carbide (SiC), Gallium Nitride (GaN), Gallium Arsenide (GaAs), Gallium Arsenide Indium (GaAlN), Gallium Phosphide (GaP), Indium Phosphide (InP), Tin Telluride (SnTe), Zinc Oxide (ZnO) and Gallium Oxide (Ga2O3)”.

Annex 3

WSC Update to Study of Semiconductor Relevant HS Subheadings,
Cases of Different Classifications of Identical Products, And Merits of Harmonization and Simplification
February 2016

As a follow up to the 2015 WSC Study of Relevant HS Subheadings, the following provides further information on product description and evidence/justification for classification for four semiconductor products identified in the WSC Study.

Product	Product Description	EU	US	Singapore	China	Korea	Japan	Justification for classification	WSC Position
IGBT Module <1000V without NTC	An IGBT-Module is an entity build to ease building power electronic equipment. It resembles an electronic component considered a switch or a multitude of switches in various topologies.	854129	854129	854129	850440	854129	854129	Europe, US, SG, JP: GIR'S 1 & 6 TEXT TO HEADING 8541 CN: rule I & VI and China Customs Tariff Book Chapter Note as well as the explanation on 85044091	**854129**
IGBT Module <1000V with NTC	An IGBT-Module is an entity build to ease building power electronic equipment. It resembles an electronic component considered a switch or a multitude of switches in various topologies.	853650	854129	854129	850440	854129	854129	EU: GIR'S 1 & 6 TEXT TO HEADING 8536 CN: rule I & VI and China Customs Tariff Book Chapter Note as well as the explanation on 85044091	**854129**
Trilith IC	Trilith IC family members combine two high-side and two low-side switches in one package. They are geared to drive high-current DC motors in an H-bridge configuration but can also be used as single	853710	854239	854239	854239	854239	854239	EU: GIR'S 1 & 6	**854239**

Annex 3

	independent switches. All Trilith ICs include overcurrent and over temperature protection for the high-side switches. For the low-side switches the user can choose between fast unprotected switches for PWM applications as well as protected switches for lower frequencies.								
Power Integrated Module		850440	850440	850440	850440	850490	854129		**854129**

Justification for Classifications

1. IGBT Module <1000V without NTC

China, Korea = HS 850440

This kind of IGBT module is composed of an IGBT and a freewheeling diode. the IGBT is defined as a three terminal device, including one gate and two loading pole (Emitter & collector). Putting on suitable voltage in between the emitter and collector, it can fulfill one direction control on current. Based on classification rule I & VI and China Customs Tariff Book Chapter Note as well as the explanation on 85044091, this IGBT module should be defined as 8504 4091 09

European Union, US, SG, JP = HS 854129

Product fulfills functionality of a transistor defined in Note 8 a) Chapter 85

WSC Position = 854129

- Product fulfills functionality of a transistor defined in Note 8 a) Chapter 85
- Note 8 Sec. 2 Chapter 85 “Headings 8501 to 8504 do not apply to goods described in heading 8511, 8512, 8540, 8541 or 8542.”

Annex 3

2. IGBT Module <1000V with NTC

China, Korea = HS 850440

This kind of IGBT module is composed of several IGBTs, freewheeling diodes and a temperature sensor. The IGBTs are defined as a three terminal device, including one gate and two loading poles (Emitter & collector). Putting on suitable voltage in between the emitter and collector, it can fulfill one direction control on current. Based on classification rule I & VI and China Customs Tariff Book Chapter Note as well as the explanation on 85044091, this IGBT module should be defined as 8504 4091 09

US, SG, JP = HS 854129

Product fulfills functionality of a transistor defined in Note 8 a) Chapter 85

German Customs = HS 853650
Product does not fulfill definition of a transistor in Note 8 a) Chapter 85 as the integrated temperature sensor (thermistor) is a not allowed component. Product has to be classified as Switch under HS-Position 853650

WSC Position = HS 854129
- Product fulfills functionality of a transistor defined in Note 8 a) Chapter 85
- The integrated temperature sensor does not influence the transistor functionality of the module. The thermistor is not electrically connected to the IGBTs and works as independent unit in the module.
- Note 8 Sec. 2 Chapter 85 “Headings 8501 to 8504 do not apply to goods described in heading 8511, 8512, 8540, 8541 or 8542.”

3. Trilith IC

US, Singapore, China, Korea, Japan = HS 854239
Product fulfills definition of Multichip IC under 8 b) 3 to Chapter 85

Annex 3

European Union = HS 853710
Product does not fulfill definition of Multichip IC under 8b) 3 to Chapter 85 as the product does not contain electrically interconnected dies in the package.

WSC Position = HS 854239
- Product fulfills definition of Multichip IC under 8 b) 3 to Chapter 85
- An electrically interconnection between the dies is not mandatory to fulfill classification as Multichip Integrated Circuit. Explanatory Notes to 8542 allow mechanical connections as well due to non -exhaustive listing of connection technologies in the Explanatory Notes to 8542. Mechanical connection of the integrated dies is provided by the package. The integrated dies are inseparably associated in the device and cannot be removed without damaging the unit in his function.

4. Power Integrated Module

WSC Position = HS 854129
- Product fulfills functionality of a transistor defined in Note 8 a) Chapter 85
- Product is a simple combination of IGBTs and diodes defined in HS 8541

Annex 3

WSC Study of Semiconductor Relevant HS Subheadings, Cases of Different Classifications of Identical Products, And Merits of Harmonization and Simplification
February 2015

Background

As the World Customs Organization (WCO) celebrated the 25th anniversary of the WCO Harmonized System Convention,[1] WCO Secretary General Kunio Mikuriya described the HS as the "backbone" of the WCO that has become the genuine *lingua franca* for commerce and industry despite the complexity of international trade today. Secretary General Mikuriya also noted that the HS had been very useful in ensuring fiscal and regulatory compliance, and that the WCO was committed to ensuring that the HS remained relevant in the future.

In furtherance of obtaining these benefits for the semiconductor industry and its customers, the WSC said in its 2013 Joint Statement that it would study semiconductor relevant HS subheadings for usefulness and relevance, and cases of different classifications of identical products, and explore the merits of harmonization and simplification.

WSC Study of Semiconductor Relevant HS Subheadings

The WCO harmonizes products up to a six digit level. Most semiconductors are in 8541 or 8542, with 8541subdivided into 8 categories at the six digit level, and 8542 subdivided into 5 categories. We understand that the WCO is not considering any changes to this structure as part of its 2017 update, but will move multicomponent integrated circuits (MCOs), now classified as parts in a number of different subheadings, into 8542.

Countries may further subdivide to track more granularity beyond the six digit level, and many have done so in the 8541 and 8542 product lines. Countries have taken different approaches to these subheadings. The US has 32 subheadings beyond the six digit level under 8541 and 31 subheadings under 8542, while Malaysia has no additional subheadings beyond the HS. The table below summarizes the number of subheadings there are in 8541 and 8542 among major semiconductor trading regions.

HS	China	CT	EU	Japan	Korea	US	Canada	Malaysia	Singapore	Vietnam
8541	3	19	2	11	28	32	13	0	5	5
8542	0	18	13	19	15	31	9	0	0	0

[1] http://www.wcoomd.org/en/media/newsroom/2013/march/hs-convention-25-anniversary.aspx

Annex 3

Among the 11 region reviewed, for 8541:[2]

- Japan is the only region to distinguish silicon transistors from non –silicon.
- The U.S. and Korea are the only regions to break packaged versus unpackaged die/wafers.
- The U.S. breaks "Mounted piezoelectric crystals into 6 kHz and Mhz levels, while Canada breaks it into 3 (above 20MHz, below 20MHz, and other). Japan breaks the category into "of crystal" and "other", while Korea into "crystal vibrator" and "other."
- Chinese Taipei breaks "Parts" into mold, lead frames for transistors/diodes, parts and fittings of quartz crystal oscillators, and other. Korea breaks "parts" into "lead frames", "of diodes", "of transistors" and "other".

Among the 11 region reviewed, for 8542:

- China, Malaysia, Singapore, and Vietnam have no subheadings beyond the 6 digit level.
- Japan is interested in knowing if the processors (8542.31) are MPU, MCU, or DSP; Canada in MPU speeds and if the IC is for HDTV.
- Europe, Korea, Canada, and the Philippines break out MCP; Japan breaks out hybrid from other (Monolithic + MCP).
- Canada, Chinese Taipei, Japan break out die versus finished packages in several subheadings.
- Korea and Chinese Taipei want memory broken into types, but not density. Europe both density and type, with 512Mbits being a break point, The US has 5 density categories for DRAM, but not for SRAM, EPROM, EEPROM or other memory. Canada has 1Mbit breakout for DRAM and 256K for SRAM.
- With regard to parts, Korea would like to know if the lead frames are for monolithic, hybrid, or MCPs. Chinese Taipei breaks out lead frames from other parts.

There was no consensus in the WSC to harmonize beyond the six digit level. One view was that there is no need to harmonize beyond 6 digit level. Another view was that the focus should be on harmonizing at the 6 digit level before discussing the merits of harmonizing beyond the 6 digit level. A third view is that detailed breakouts in 8541 are no longer relevant nor useful and that few analysts if any actually use the data for analysis.

Cases of Different Classifications of Identical Products

[2] The 11 regions reviewed were the GAMS members (China, Chinese Taipei, Europe, Japan, Korea, and the U.S.), and Canada, Malaysia, Philippines, Singapore, and Vietnam.

Annex 3

The WSC has found that identical semiconductor products are classified differently. Examples of such products are in the table below:

Product	Europe	US	Singapore	China	Korea	Japan
IGBT Module Stacks	850490	854130 (or 854129 or 854110 depending if it is a stack of IGBTs, Diodes or thyristors)	850490	850490	850490	854129
IGBT Module <1000V without NTC	854129	854129	854129	850440	854129	854129
IGBT Module >1000V without NTC	854129	854129	854129	850440	854129	854129
IGBT Module <1000V with NTC	853650	854129	854129	850440	854129	854129
IGBT Module >1000V with NTC	853590	854129	854129	850440	854129	854129
High Frequency Amplifier	854370	854129	854370	854129	854370	854129 or 854233
Multichip Switching IC	854239	854129	854239	854239	854239	854239
Hallsensor IC with capacitor	902910	854370	854239	854239	854370	854239
Dual Die Hallsensor IC	903180	854239	854239	903180	903180	854239
Current Mode Controller IC	854231	854231	854231	854231	850490	854231 or 854239
Trilith IC	853710	854239	854239	854239	854239	854239
Intelligent Power Module	853710	850440	850440	850440	850490	854129
Power Integrated Module	850440	850440	850440	850440	850490	854129

Merits of Harmonization and Simplification

With regard to the merits of harmonizing interpretations at the 6 digit level, the WSC found that:

- Trade is facilitated when the rules are the same. This is the foundation principle behind the Harmonized System.
- This would reduce administrative burden of parallel data administration and reduce efforts to be compliant in different regions/countries.

Annex 3

- Global supply chains have lowered costs for consumers. Harmonization lowers the barriers between parties in the supply chain.

WSC Recommendation on Harmonization of Customs Classifications

As per the May 2014 WSC Joint Statement, the WSC recommends that its governments and authorities agree to address existing different interpretations of the Harmonized System for semiconductor products. The customs agencies should start by working with industry to harmonize articles identified in the above WSC study of different interpretations. The discussions should also explore various means to achieve harmonization such as discussing with WCO or adding interpretation notes to Chapter 85 of a region's Harmonized Tariff Schedule.

In harmonizing different HS interpretations for products that might be classified as semiconductors, the WSC encourages customs agencies to give appropriate emphasis to Chapter 85, Note 8, of the Harmonized System which states in part that "For the classification of the articles defined in this note, headings 8541 and 8542 shall take precedence over any other heading in the Nomenclature, except in the case of heading 8523, which might cover them by reference to, in particular, their function."

The WSC looks forward to working with the World Customs Organization (WCO) and GAMS HS classification experts to discuss different interpretations and the application of the HS rules of interpretation in the context of evolving semiconductor and integrated circuit technologies. As one example, the working group could consider as a starting point for discussion that, in cases of products consisting of two or more components classified under 8541 combined to all intents and purposes indivisibly, whether or not on one or more insulating substrates, with or without leadframes, but with no other active or passive circuit elements; the working group should harmonize around the classification used by region(s) that classify the product under 8541.[3]

[3] Active circuit elements do not include diodes and transistors

GOVERNMENT AND AUTHORITIES MEETING ON SEMICONDUCTOR (GAMS)
WORKSHOP ON REGIONAL SUPPORT PROGRAMS

Tuesday PM, October 18, 2016

Attendance by GAMS Members; GAMS region government officials and affiliated institutions handling Regional Support issues; those involved directly in support programs as grantors or recipients; economic experts on international obligations; JSTC delegates; and other relevant invited government and industry experts

Time	Meeting	Speaker
10 mins	**Welcome and Introduction by GAMS Chair**	EU GAMS Chair
20 mins	**WSC Report to GAMS on Information Sharing of Regional Support Programs**	2016 WSC Chair (Korea)
1 hour	**Expert Presentations** • (1) Market oriented best practices for regional support programs - GAMS/WSC principles - Transparency - Open markets - Open participation • (2) Economic Assessment of Regional Support Programs • (3) WTO disciplines • Q&A	Presentation from: 1) Industry Expert 2) Electronics industry analyst/economist 3) Expert on relevant international commitments
15 min	*Coffee Break*	
1.5 hours	**GAMS Roundtable** • Comparison of Regional Support Programs, trends and best practices in WSC regions • Open Discussion	***GAMS and Experts from all regions***
30 mins	Summaries and discussion of how to best achieve information sharing and transparency	GAMS members from each region
15 mins	Conclusion and Next Steps	EU GAMS Chair