



FINAL

## **JOINT STATEMENT OF THE 20<sup>th</sup> 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

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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 20<sup>th</sup> 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.

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## **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 KgCO<sub>2</sub>e/cm<sup>2</sup> 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

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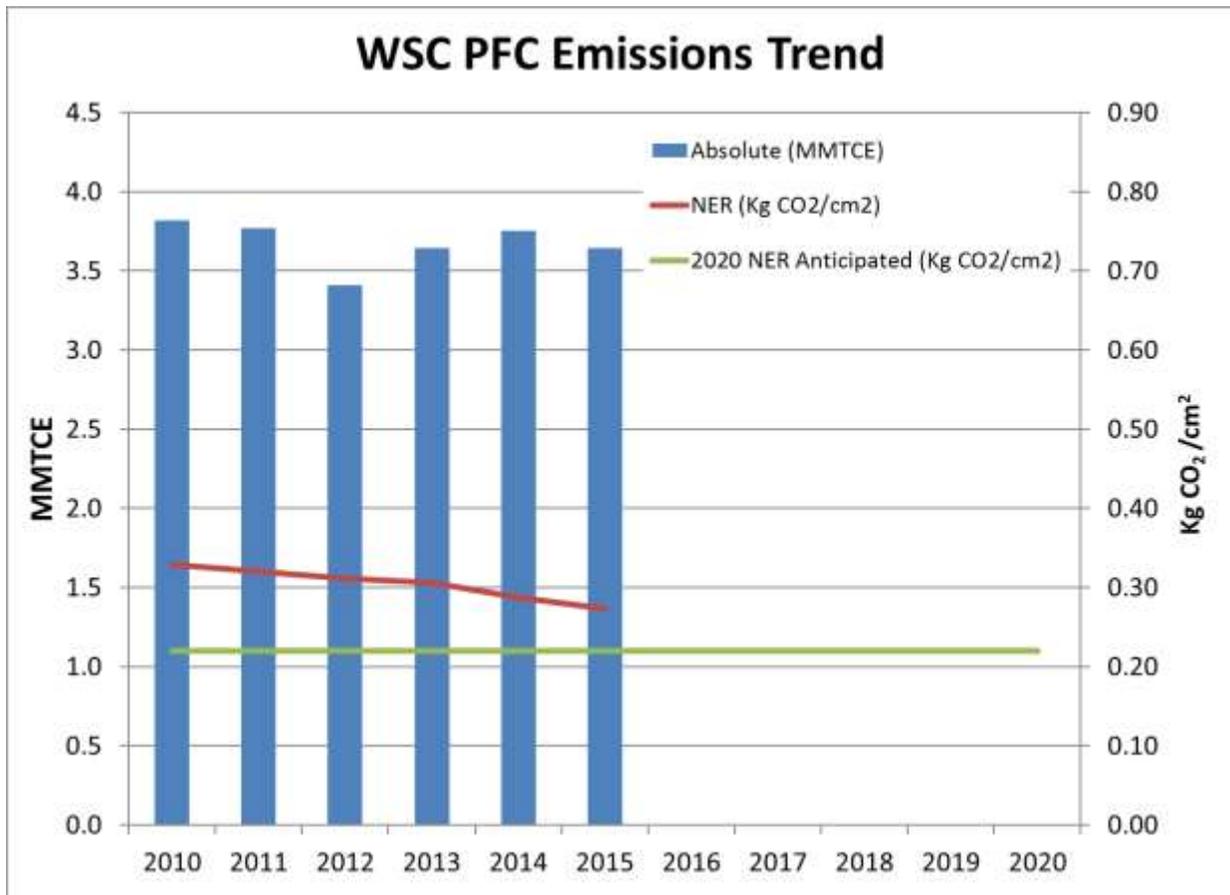
association) in reporting of emissions and the implementation of best practices for new fabs.

- A NER based measurement in kilograms of carbon equivalents per area of silicon wafers processed (KgCO<sub>2</sub>e/cm<sup>2</sup>) that will be a single WSC goal at the global level.

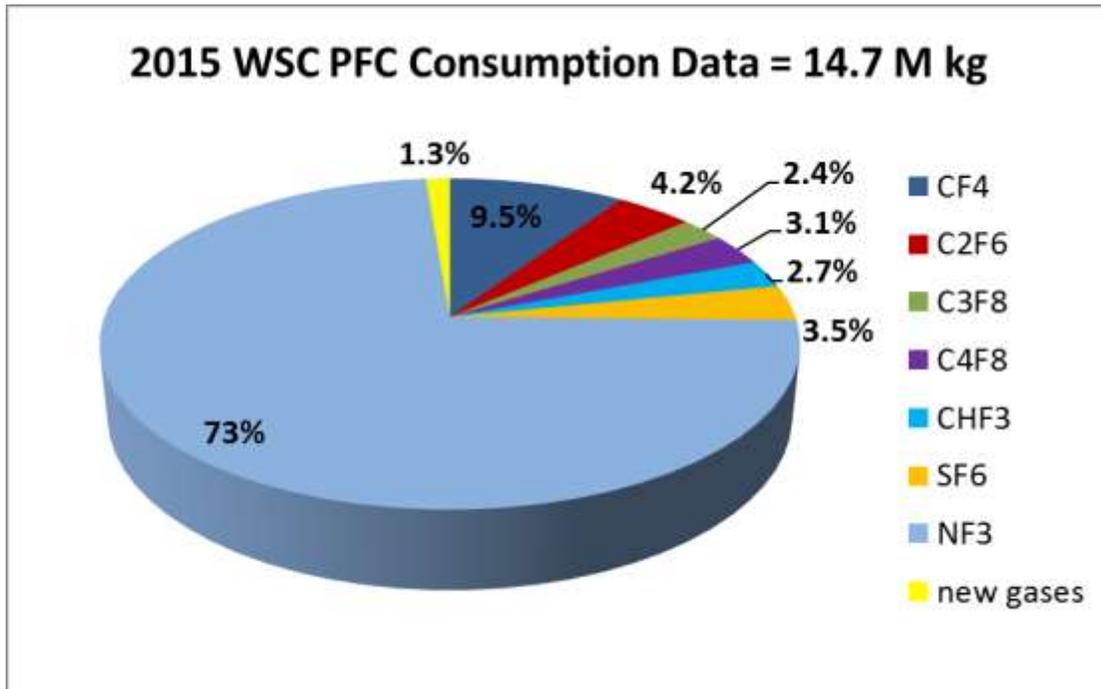
The WSC agreed to report its progress on this new voluntary agreement on an annual basis. This external reporting will provide aggregated results of the absolute PFC consumption and emissions alongside each other and NER trends. These figures represent combined emissions for the six WSC regional associations, 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<sub>2</sub>F<sub>2</sub>, C<sub>4</sub>F<sub>6</sub>, C<sub>5</sub>F<sub>8</sub> and C<sub>4</sub>F<sub>8</sub>O.

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 0.27KgCO<sub>2</sub>e/cm<sup>2</sup> in 2015. Please see the graph below which compares these results to 0.22Kg/cm<sup>2</sup> equivalent to a 30% NER reduction anticipated by 2020.

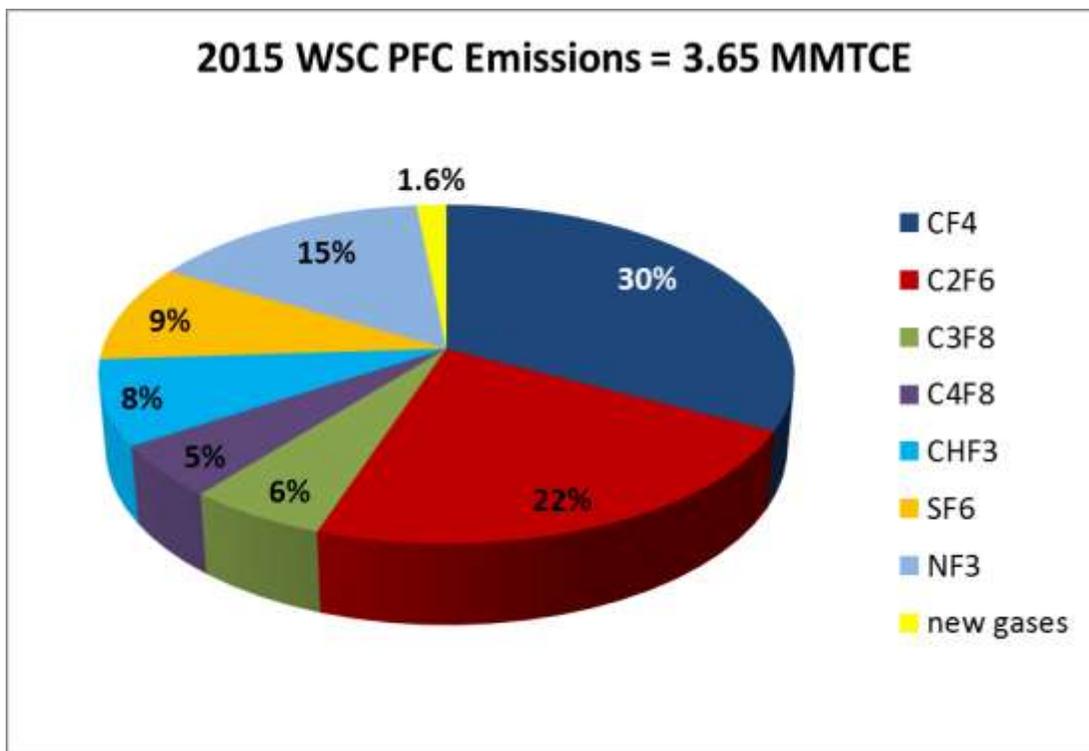
## Results of WSC PFC Emission Trends



## 2015 WSC PFC Consumption and Emissions Data



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



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## ***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 cm<sup>2</sup> 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

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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,

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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

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**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.<sup>1</sup>

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.**

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<sup>1</sup> “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).

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## **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.

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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

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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.**

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- 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

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**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

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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**

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**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

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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.**

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- **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 1<sup>st</sup> 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

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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.

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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**

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**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:**

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- 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,

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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.**

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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**

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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

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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**

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**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.**

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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**

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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>

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**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