JOINT STATEMENT OF THE 19th MEETING OF WORLD SEMICONDUCTOR COUNCIL (WSC)  
MAY 21, 2015  
Hangzhou, China

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 19th meeting of the World Semiconductor Council (WSC) today. This meeting, held in Hangzhou, China, 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 Tzu-Yin Chiu, CEO and Executive Director of Semiconductor Manufacturing International Corporation, and chair of the host Delegation of Semiconductor Industry Association in China. Mr. Chiu welcomed the delegates to Hangzhou. The other delegations attending the 19th WSC meeting – the SIAs in Chinese Taipei, Europe, Korea, Japan the US, were chaired, respectively, by Mr. Nicky Lu of Etron Technology, Mr. Reinhard Ploss of Infineon Technologies, Mr. Shozo Saito of Toshiba Corporation, Mr. Hyun-Ki Ji of Samsung Electronics, and Mr. Ajit Manocha of GLOBALFOUNDRIES.
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 2014, the semiconductor market experienced a high annual growth of 9.9% and reached a new record high value of 336 Billion US$. Americas and Asia/Pacific remained as the regions with highest YoY (year over year) growth rates. Asia/Pacific, including China, contributed the largest portion in worldwide market size. In terms of product types, logic maintained the largest segment, followed by memory, while sensors, driven by automotive, consumer and communication, remained as the fastest growing products. With respect to applications, communication and automotive continued to gain share of the market, whereas computer unchanged and other segments slowing.

**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.

**(1) 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 2014 report also includes the reporting of newly used gases CH2F2, C4F6, C5F8 and C4F8O. The 2013 PFC data was revised and published again on WSC website as annex III- Revision of 2013 WSC PFC Data.

The fourth year results are as follows: in 2014, combined WSC absolute emissions of PFCs decreased by 1.7% compared to 2010, to 3.75 MMTCE in 2014. The NER decreased by 12.9%, compared to 2010 to 0.29 kgCO2e/cm2 in 2014. 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

WSC PFC Emissions Trend

- Absolute (MMTCE)
- NER (Kg CO2/cm²)
- 2020 NER Anticipated (Kg CO2/cm²)


Graph showing trends over the years.
2014 WSC PFC Consumption and Emissions Data

2014 WSC PFC Consumption Data = 11.7 M kg

(New gases includes CH$_2$F$_2$, C$_4$F$_6$, C$_5$F$_8$ and C$_4$F$_8$O)

2014 WSC PFC Emissions = 3.75 MMTCE
(2) 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.

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. The normalized 2014 consumption (per cm2 of silicon wafers processed) of electricity was reduced by 33%, water used in manufacturing was reduced by 50%, and waste generated was reduced by 32% compared to 2001. The WSC will continue to pursue environmental conservation programs in these areas and continue to share examples of improvement practices.

The WSC emphasises that process and facility equipment suppliers can assist in ensuring that energy saving potentials are a key element in their design of leading edge equipment. WSC requests that suppliers evaluate cost effective energy improvements to existing tool equipment sets and establish energy optimisation goals as part of new equipment design, and propose to tool users actively.

(3) Chemical Management

The WSC notes that Governments/Authorities around the world are considering controls on chemicals, including perfluorinated chemicals, that may be used in the semiconductor manufacturing process. These chemicals may also be found in trace amounts in finished semiconductor devices or in the complex manufacturing equipment (known in our industry as “tools”) that are critical to the manufacturing of advanced semiconductors. In response to concerns regarding perfluorinated chemicals, the global semiconductor industry has taken action to phase out the use of some of these chemicals of concern. For example, the industry has successfully worked to phase out non-critical uses of some of these chemicals, such as perfluorooctanyl sulfonates (PFOS), and has minimized the continued use and releases of these chemicals in some remaining essential
uses. 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.

In addition to the regulation of critical chemicals used in manufacturing processes, we note that Governments/Authorities are increasingly considering regulations of 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 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 impact global commerce of semiconductor devices and manufacturing tools that are critical to our industry.

Some recent proposed regulations impacting chemicals in processes and articles present significant challenges to the semiconductor industry. These proposals may restrict the use of essential chemicals where there are no available “drop-in” alternatives that meet the industry’s functional and performance requirements. For example, in the United States, the Environmental Protection Agency has issued a proposed rule on long-chain perfluoroalkyl carboxylate (LCPFAC) substances that would restrict the use of these substances or their presence in articles without setting any threshold level. In the EU there is a proposed REACH restriction of Perfluorooctanoic acid (PFOA), its salts, and PFOA-related substances in critical semiconductor manufacturing processes and in all articles, setting a threshold limit of 2 parts per billion (ppb).

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. The WSC recommends that Governments/Authorities take into account the limited potential risk of exposure from uses in the semiconductor industry and our supply chain, the 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. The WSC recommends that any regulations provide the semiconductor industry with sufficient time to evaluate our uses of chemicals that may be subject to potential regulation and the uses within our supply chain. If restrictions on chemicals used in our industry are deemed to be necessary and appropriate for the protection of human health and the environment, the WSC recommends that Governments/Authorities provide sufficient time for the industry to identify, qualify, and
transition to alternative chemicals that satisfy our functional and performance requirements, and be provided with exemptions to allow continuation of critical uses of these chemicals in processes and articles. In addition, where regulations cover articles, the threshold levels in regulations should be harmonized globally and be technically feasible.

**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 countries¹.

The global semiconductor industry is a recognized leader in addressing conflict minerals. The semiconductor industry has led the development of compliance tools that have been adopted by other industry sectors and has implemented advanced programs for tracking progress across our supply chain.

The WSC has undertaken industry surveys with its members to ascertain the state of progress of implementation of this conflict free supply chain policy across the industry in 2013 and 2014. These surveys indicate that although the industry as a whole is not currently conflict free, significant progress and improvements have been made. The surveys also highlight that whilst it still can be challenging to get accurate data from the various levels of the multi-tiered supply chain, the processes and management systems now in place are becoming more robust and mature across the industry.

The WSC will continue to promote the use of common tools, methods and standards among WSC member associations on this issue to facilitate implementation. The WSC would recommend that if GAMS members are considering new conflict minerals type legislation, that the legislation should be globally aligned and should utilize existing global tools (such as the OECD due diligence guidance framework) and existing successful industry initiatives (such as Conflict Free Sourcing Initiative).

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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

The WSC notes that the Chairman’s statement made at the conclusion of the 2014 GAMS meeting included the following request:

A. Trade Secrets

The WSC has recognized the importance of trade secret protection, and has been studying the core elements for trade secret protection legislation. At its most recent meeting in October 2014, the GAMS noted the WSC’s concerns that the theft of trade secrets is a growing problem, and stated that it will endeavor to find ways to advocate for enhanced trade secret protections in trade agreements and domestic laws.

The semiconductor industry is one of the most innovative-intensive sectors. Usually, the trade secret in the semiconductor industry has a short lifetime owing to the rapid pace of technological development and upgrade. The trade secret is the critical and major asset of the company. Once it is stolen, the company may lose its competitive advantage and its market share could be jeopardized.

The WSC notes that the WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) calls on members to provide for the protection of “undisclosed information” that is secret and has commercial value, and to protect such information from disclosure, acquisition or use in a manner contrary to “honest commercial practices.”

To protect semiconductor investments and promote further innovation, WSC members have agreed upon a set of “core” elements in model trade secret legislation, as attached in the Annex 1 entitled “Core Elements for Trade Secret Protection Legislation”.

The WSC therefore calls on the government authorities, esp., the GAMS, 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 WSC has long recognized the importance of patent quality and has encouraged adoption of measures aimed at improving it. In order to pursue this objective, the WSC has been in communication with WIPO and the IP5 (Patent Offices of US, EPC, Japan,
Korea and China) to encourage collection and dissemination of patent quality data as recommended by the WSC.

This effort has contributed to the recent development that both the WIPO MIA (Meeting of International Authorities) and the IP5 have created a committee to work on harmonized patent quality measures. Their first meetings on the topic were conducted the week of October 13th, 2014 in Beijing, China. The WSC is gratified by feedback received from WIPO to the effect that WSC’s contribution in driving Patent Quality metrics at WIPO and the IP5 on the topic “broke the ice” in facilitating the IP5 subcommittee taking up patent quality, and the same with the MIA (meeting of international authorities) in WIPO.

The WSC also appreciates the GAMS recent reiteration of its support for the continuation and deepening of cooperation between Patent Offices of GAMS parties in order to enhance patent quality, by measures such as harmonizing classification and patent examination methods, information exchange, cooperation in the training of examiners, increasing coordination in processing patent applications, and improving machine-translation systems.

One ongoing initiative the WSC has been pursuing is to encourage and facilitate individual Patent Offices to annually provide to WIPO a list of standardized statistics that could bear on patent quality. The WSC members have agreed upon a list of such statistics and have provided them to member POs. WSC has achieved significant progress in this initiative, with WIPO agreeing to keep and publish such statistical data. In this regard, WSC has presented a written request to WIPO to begin collection of the data from participating POs for the fiscal year of 2014.

The WSC continues to communicate with the Patent Offices and WIPO on these efforts and initiatives to improve patent quality. The WSC encourages the GAMS to support these initiatives and encourage member POs to share with WIPO annually the requested patent quality metrics.

**C. Inventor Remuneration**

Semiconductor companies must invent, innovate and introduce leading edge products for the world to continue to enjoy the benefits of semiconductor technology. Thus, to stimulate innovation, they hire certain highly skilled engineers and technical staff whose primary responsibility is to be creative and inventive, for which they are duly compensated. The long time practice of the industry has been to also provide invention
awards, typically monetary, to further incentivize the creation of inventions and the seeking of patent protection. Employers and employees should be free to enter into contracts related to employee invention awards, or to allow employees to be bound by employer inventor award policies.

In view of licensing practice in semiconductor industry, it is important for the companies deriving commercial value from patent licensing in the semiconductor industry to remain free to reinvest in R&D to stay competitive. For companies licensing their patents on a portfolio basis, for the purpose of inventor remuneration, it is not feasible to separately calculate the value of any individual patent in the portfolio. Since semiconductor products are complex and generally require multiple manufacturing steps and embed multiple types of circuits and functions, for the purpose of inventor remuneration, it is not feasible to separately calculate the value of any individual manufacturing step or design detail contributing to the products.

However, some national patent laws, as presently written (or drafted to be implemented), require the employer to award its employee a percentage of the royalties received for a patent covering an invention made by that employee and/or to award its employee based on the commercial benefits originated from inventions. And in some cases the laws require inventor remuneration for trade secrets. These laws create a significant burden, both administratively and financially, on employers and discourage companies from locating R&D operations in nations with such laws.

In view of the negative consequences of such laws, the WSC urges GAMS to support changes to those laws in order to simplify reasonable inventor remuneration practices by: 1) allowing employers and employees to enter into contracts related to employee invention awards, or allowing employees to be bound by employer inventor award policies, that will in particular avoid the need for a case-by-case determination of a specific contribution brought by any invention or related patent, and 2) eliminating mandatory requirements for remuneration for trade secrets.

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.

In 2014, the WSC recommended that GAMS members pursue the adoption of appropriate and balanced policies and legislative measures to regulate abusive litigation by patent holders, in order to help advance innovation and improve overall patent systems. At the invitation of GAMS, the WSC’s 2014 Joint Statement sets forth a series of specific recommended initiatives and reforms as attached in Annex 2. Unfortunately, to date there has been little progress within the GAMS member jurisdictions to implement these reforms. At the same time, abusive patent litigation practices continue to undermine innovation.

The WSC encourages GAMS to support and implement balanced reforms as embodied in the WSC’s recommendations as attached in Annex 2. 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.

The WSC reiterates its commitment to intensify anti-counterfeiting work activities, and has an Anti-counterfeiting Task Force with the aim of reducing and eliminating counterfeits from the global semiconductor market. These activities will also include sharing of examples of anti-counterfeiting capacity building measures that could be employed across the semiconductor industry.

WSC members continue to increase awareness of the public health, safety and other performance risks caused by counterfeits at international public conferences. As part of this awareness-raising, the WSC announces its support for the World Anti-counterfeiting Day initiative on 24th June 2015 that will be utilized to highlight the problem of counterfeiting (See Annex 3). The WSC made the semiconductor anti-counterfeiting poster for awareness raising, and each Association has posted it in exhibitions, fairs and seminars worldwide.

WSC Members have also promoted and circulated widely the WSC’s White Paper
“Winning the Battle against Counterfeit Semiconductor Products”. This paper describes the risks of use of counterfeit products. The WSC encourages its member associations and the GAMS to reach out to participants in the semiconductor market to increase awareness of the problems caused by counterfeits so that counterfeit products do not enter into commerce. In this regard, WSC members also underline 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 advances cooperation with GAMS and their agencies in the areas of awareness raising by using the White Paper and the Poster.

The WSC calls on GAMS members to continue to implement appropriate measures (including domestic, bilateral and multilateral countermeasures) to deal with counterfeit semiconductors. WSC is committed to supporting GAMS members in employing proactive enforcement measures, including strict search and seizure, and working closely with the industry.[JSIA]

The WSC encourages GAMS members to take note of the WSC Anti-counterfeiting White Paper, the Poster and to share information on countermeasures in their outreach to other governments/authorities customs agencies, and to continue to report the results of these countermeasures and enforcement activities at the forthcoming 2015 GAMS meeting.

The WSC also welcomes the GAMS agreement at the Fukuoka 2014 GAMS meeting regarding coordination with their customs and law enforcement authorities.

The WSC looks forward to continued coordination with the GAMS in stopping counterfeits at the borders and vigorously prosecuting perpetrators who make and distribute counterfeits, and will continue to cooperate with GAMS customs and enforcement agencies in these efforts.

**Multi-Component IC**

WSC calls upon GAMS to continue their efforts to achieve swift elimination of tariffs and non-tariff -barriers for all semiconductor products including new types of semiconductor products such as multi-component ICs (MCOs).
The WSC appreciates the ongoing efforts and progress made by governments and authorities to achieve duty-free treatment for MCOs via expansion of the Information Technology Agreement (ITA) in order to reflect the semiconductor industry’s technological progress over the last 18 years. The WSC urges GAMS and all ITA Parties to recognize the concessions and commitments made, and prioritize intensified consultations in order to bridge the remaining small differences and conclude an agreement by the WTO Ministerial Conference in Nairobi in December 2015.

Given that MCOs will be classified under the HS heading 8542 effective January 1st, 2017, the WSC urgently calls on GAMS to work towards implementation of duty-free treatment for MCOs upon entry into force of the expanded ITA, with no staging period.

The WSC welcomes the decision by the World Customs Organizations (WCO) to include MCOs under the Harmonized System (HS) nomenclature heading 8542 effective in 2017. This decision will ensure that the HS nomenclature stays up to date with technology advances in semiconductors and facilitates trade through reduction of unnecessary complexity and administrative burden.

The WSC strongly supports the WCO Secretariat’s draft Explanatory Notes to HS heading 8542 for Multi-component ICs (MCO), which is closely aligned with the WSC Explanatory Note consensus proposal submitted to the WCO in February 2015. WSC respectfully asks GAMS and their customs authorities to support the Explanatory Note language that takes into consideration the WSC consensus proposal. The WSC stands ready to offer any required clarification.

The WSC has agreed to work on a consensus definition to include semiconductor-based transducers (sensors, actuators, resonators, oscillators) under HS heading 8541 within the HS2022 review. The WSC calls on GAMS and their customs authorities to support this process.

**Encryption Certification & Licensing Regulations**

WSC notes the deepened dialogue among GAMS trade authorities and information security experts and officials, towards a common understanding of current practices and policies in the areas of licensing, standardization, certification and market access for encryption semiconductor products at the 2014 GAMS seminar.

The overall objective of the WSC in this context is to achieve an improved global information security environment for IT security products with encryption through
increased accessibility, transparency, adoption of international standards, and non-discriminatory and open procedures and rules. This will help keep markets open and free from unnecessary regulation and discrimination, promote innovation, enable the dissemination of leading edge security solutions, and thus allow the digital economy to flourish.

The seminar addressed various approaches, building understanding of existing frameworks and promoting alignment with the WSC best practices and principles.

WSC welcomes the decision by GAMS to continue a structured dialogue on encryption through a second encryption seminar at the 2015 GAMS meeting. The WSC looks forward to the continued commitment of all relevant trade authorities and information security experts and officials to actively participate. As requested by GAMS, the WSC has prepared a proposal for the 2015 GAMS encryption seminar, appended to this Joint Statement (See Annex 4).

The WSC recommends, as the objective for the 2015 seminar, to explore needs and possibilities towards global convergence of encryption regulatory practices, IT security standards, certification and licensing. During the seminar the WSC will share its perspective on Industry IT security challenges and benefits of global convergence of encryption approaches in line with WSC best practices and principles.

The WSC encourages GAMS and information security experts and officials to report, during the 2015 seminar, on the results of their review of concerns raised by the WSC - as per 2014 GAMS Chair Summary - and engage in a dialogue directed towards achieving the following long-term targets:

- Define ways to reach harmonized standards among different countries or regions.

- Ensure that products with cryptographic capabilities are not regulated by Governments as a general matter except in narrow and justifiable circumstances in line with the WSC encryption principles.

- No regulation, technology mandates, or specification that directly or indirectly favors specific technologies, limits market access or leads to forced transfer of intellectual property.

- All necessary regulatory requirements to be applied on a non-discriminatory basis and in a manner no less favorable than that granted to domestic producers.

- Process to identify certification schemes and testing laboratories in different regions should be applied in a non-discriminatory, transparent, predictable manner, consistent
with WSC principles. Laboratories should be independent and trusted, freely selected by applicant companies, and employ specific non-disclosure guarantees which govern the sharing of confidential information, so that intellectual property and confidential information are protected.

- Identify benefits and feasibility for applying mutual recognition of laboratories.

**Exploration of Worldwide Customs/Trade Facilitation**

WSC members applaud the adoption of the Protocol of Amendment to include the WTO Agreement on Trade Facilitation (TFA) into Annex 1A of the Agreement establishing the WTO, and extend appreciation to GAMS authorities for supporting this outcome.

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 its benefits to the semiconductor industry, and urges GAMS -and requests GAMS to urge all the other members of the WTO- to act expeditiously to complete domestic ratification procedures to enable the TFA to enter into force by the end of 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.

The WSC also remains committed to working with GAMS customs agencies and the World Customs Organization to achieve harmonization of identical semiconductor products that are classified differently, as identified in the WSC Study of relevant semiconductor HS headings. The WSC is working to update the Study to include information on how the classification discrepancies were derived, in order to facilitate discussions on the most appropriate means to achieve harmonization. The WSC recommends that GAMS members encourage their customs authorities to address in the WCO different HS classifications for semiconductor products identified by the WSC. WSC remains committed to working with customs authorities to explore various means to achieve harmonization.
The WSC supports the Authorized Economic Operator (AEO) concept as it provides the opportunity to expedite processing and release of shipments and in general to facilitate import-export operations for trusted traders.

Over the recent years, a number of countries, also within the GAMS, have implemented AEO programs. The WSC encourages GAMS to further strengthen the AEO concept by granting enhanced benefits to trusted traders, for example, further reduction of required data for customs transactions, enhanced use of self-assessments, more consistent mutual recognition agreements, and aligning global customs security approaches.

**Regional Support Programs & Regional Stimulus**

While WSC supports appropriate stimulus measures by the respective governments and authorities, WSC confirms its view that government actions should be guided by market principles and avoid adoption of protectionist or discriminatory measures. WSC confirms that competitiveness of companies and their products, not the intervention of governments and authorities, should be the principal determinant of industrial success and international trade, and that assistance should be provided in a market oriented fashion. Per the request of the GAMS, the WSC notes that it may recommend consultations on issues of concern to the GAMS, and will continue to discuss a consultation procedure for the semiconductor industry.

In 2014, the GAMS welcomed the sharing of information and discussion of relevant government support programs in the semiconductor sector in the WSC, and requested further information on such programs.

In response to this request, the WSC continued its discussion and information sharing, and has prepared a report to GAMS that summarizes relevant government support programs for the semiconductor industry in each of the WSC regions. A written report and a Powerpoint presentation will be provided at the next GAMS meeting.

**Growth Initiatives**

The WSC welcomes the efforts by WTO members to negotiate an Environmental Goods Agreement (EGA) that includes technologies that rely on semiconductors. Semiconductor technology is used in a wide variety of environmental goods, such as LED and CFL lighting, solar cells, process control equipment, efficient power supplies,
variable frequency drives, electric motors, and inverter motor control technology; as well as other goods that are already covered under the Information Technology Agreement (ITA). Semiconductor technology also provides the intelligence and communications capabilities of smart meters and intelligent buildings. By eliminating tariffs on environmental goods, a robust EGA promotes the adoption of semiconductor technology for the benefit of consumers and the environment.

A particular benefit to the environment is the role semiconductors play in enabling energy efficiency. The UN Environment Programme has noted 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. It also noted, however, that shifting markets to efficient air conditioners, domestic refrigerators and electric motors can reduce global energy consumption by 10% annually, equivalent to the output of 600 large power plants and a reduction of global carbon dioxide emissions of 1.25 billion tons each year. Semiconductors are essential to the achievement of this goal because they are essential to such more efficient products.

The WSC therefore recommends that GAMS members work with their EGA negotiators to conclude an agreement that covers energy efficient, semiconductor-enabled environmental goods. The WSC recognizes the customs-related challenges EGA members will need to overcome to include the full range of energy efficient products in this agreement and calls upon GAMS members to work with EGA negotiators to overcome such challenges.

The WSC notes the nine Recommendations it made to GAMS in 2014 with respect to facilitating growth in our industry in the healthcare, automotive and energy efficiency areas; we look forward to re-engaging with GAMS on these points at the next meeting in October 2015, and to GAMS' feedback on implementation.

**OECD BEPS**

The WSC remains concerned that the implementation of recommendations emanating from the OECD Base Erosion and Profit Sifting (BEPS) project will potentially result in double economic taxation and the inappropriate release of confidential taxpayer information.

The OECD is developing a package of recommendations in fifteen (15) specific issue areas related to international taxation that will be delivered to the G20 Finance
Ministers in October 2015. It is likely that different countries will implement the OECD recommendations in different ways, and on different schedules. This will increase the potential for double economic taxation of corporate income and disputes between governments and taxpayers.

The WSC calls on the GAMS members to minimize the potentially harmful impact of OECD BEPS recommendations by adopting measures to strengthen dispute settlement procedures and protect corporate information provided to governments in the master file and country-by-country reports.

The WSC encourages peer reviews by other countries, good faith adherence to the competent authority process in tax treaties, and adequate funding for the competent authority process to strengthen dispute settlement procedures and reduce the potential for double economic taxation.

The WSC recommends that the proposed “master file” and country-by-country reports transmitted to tax authorities receive privacy protection. The OECD has described the information to be required in the master file as providing a “blueprint” to a multinational corporation (MNC), and has stated that the master file should include information on the MNC’s intangibles, financial and tax positions. The WSC believes that if such information is provided to the relevant government authority through the “master file,” it should receive privacy protection and not be disclosed publicly. Furthermore, disclosure requirements in different countries should remain limited to those data and other information which are both necessary and relevant in conducting transfer pricing assessments according to the arm’s length standard as endorsed by existing treaties and other laws and regulations.

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 on October 22, 2015 in San Francisco, the US.

Next Meeting

The next meeting of the WSC will be hosted by the Semiconductor Industry Association in Korea, and will take place in Seoul on May 26, 2016.
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 Europe: http://www.eeca.eu

Semiconductor Industry Association in China: http://www.csia.net.cn


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
Annex 1

Core Elements for Trade Secret Protection Legislation

The relevant elements that should be considered in conjunction with the trade secret protection legislation are as follows:

1. Expressly recognizes trade secrets as a form of IP (per TRIPS Article 1.2)

2. Defines key terms as follows:

- "Trade secret" includes any information that (1) derives economic value, actual or potential, from not being generally known to the public; and (2) is the subject of reasonable efforts under the circumstances to maintain its secrecy.

- "Misappropriation" means (1) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or (2) disclosure or use of a trade secret of another, without consent, by a person who used improper means to acquire the trade secret or who knows or has reason to know that the trade secret:(i) was acquired by improper means; (ii) was derived from or through a person who acquired it by improper means; (iii) was acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or (iv) was derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use.

- "Improper means" as used in the previous section includes theft, bribery, acquisition of trade secret by misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means. Reverse engineering or independent derivation alone shall not be considered improper means.

- "Person" means a natural person, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, government, government division or agency, or any other legal or commercial entity.

3. Criminal Action:

- **Intent/Knowledge**: The knowing misappropriation of a trade secret shall be a
• Penalties: In criminal actions, the law shall impose criminal penalties that are sufficient to deter such offenses, including fines, damages, and/or imprisonment. In cases of repeated misappropriation, the courts shall have the authority to impose additional penalties.

4. Civil Action:

• Cause of Action: A person who misappropriates a trade secret shall be liable in a civil action brought by the owner of the trade secret or other party having a legal right to enforce the trade secret. of the trade secret. The misappropriation of a trade secret does not require its actual use to be actionable.

• Damages: The courts shall have the authority to award damages against a person found to have violated applicable law. Damages shall be based on the greater of (i) the actual loss caused by the misappropriation, or (ii) the amount by which the offender was unjustly enriched because of the misappropriation.

• Injunctive Relief: The courts shall have the authority to grant injunctive relief, including preliminary and final injunctions, where necessary to prevent actual or threatened misappropriation.

5. Preservation and Collection of Evidence/ Protection of Confidential Information:

• Preservation and Collection of Evidence: Courts shall have the authority to issue orders to preserve relevant evidence and to compel parties to produce relevant evidence in the appropriate circumstances, including to compel third party inducers to rebut a claim of inevitable disclosure.

• Protection of Evidence/Information: All evidence shall be subject to a protective order to ensure that confidential, private, proprietary, or privileged information is appropriately protected and that access is appropriately restricted. The courts further shall take reasonable measures to preserve the secrecy of the alleged trade secret(s). In addition to protective orders, such measures may include holding in-camera hearings, sealing filings or records, or ordering parties not to disclose the alleged trade secret without prior court approval.

6. General Procedures:

• Expedited Procedures: Procedures in misappropriation cases shall not be unnecessarily complicated or costly, or entail unreasonable time limits or unwarranted delays. Remedies shall be expeditious to prevent misappropriation
and sufficient to constitute a deterrent to further misappropriation.

- **Fair Proceedings**: According to the relevant national procedural laws, parties may be entitled to substantiate their claims and to present probative evidence in fair proceedings, regardless of whether the evidence is in written, oral, or other form. Parties may be permitted to present testimony from qualified experts. A written record of the evidence shall be maintained by the court.

- **Decisions**: Decisions on the merits of a case shall be in writing where possible, and shall be made available without undue delay.

7. **Jurisdiction**:

In addition to jurisdiction in a particular country, state or region where the trade secret misappropriation is conducted by a person from that country, state or region that adversely affects commerce or harms persons in that same country, state or region, if the effects of extraterritorial behavior or crimes by a person adversely affect commerce or harm persons within a particular country, state or region and the individual country, state or region determines, after considering all relevant factors including whether the person has sufficient contact with the particular country, state or region, that jurisdiction over such person is justified, then jurisdiction in a court in such country, state or region is permissible.
Annex 2

WSC Recommendations to GAMS on Abusive Patent Litigation (NPE/PAE)

- Reform patent litigation rules and standards for fee shifting, to make it easier for a court to award attorney fees, in appropriate cases, to accused patent infringers who ultimately defeat the infringement allegations leveled against them; require heightened pleading requirements for patent lawsuits; implement appropriate revisions and limits to discovery procedures; and require greater patent ownership transparency (identification of appropriately defined real party in interest) in lawsuits.

- Curtail the use of bad faith demand letters through the imposition of appropriate sanctions, against the widespread practice of sending fraudulent or materially misleading demand letters in connection with the assertion of a patent, but exclude legitimate communications relating to patent licenses and infringement notices from such sanctions.

- Undertake or continue studies by relevant agencies of GAMS members to examine aspects of patent abuse and quality.

- Support studies into the potential anticompetitive impact of entities that are primarily in the business of buying and asserting patents, to examine and to develop a better understanding of how they impact innovation and competition.
Annex 3

Press Release

June 4, 2015

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 24th 2015. In the United Kingdom of Great Britain and Northern Ireland (UK) an event to mark WAC day is being held in coordination with the UK’s Border Force and takes place at Customs House, Heathrow airport on June 4th. The WSC will be represented by the European Semiconductor Industry Association (ESIA) who is hosting an exhibition stand at this event, which will detail the measures which the industry takes in the fight against counterfeiting.

The UK Border Force is the UK customs enforcement agency operating on the front line in the fight against counterfeit product entering the UK’s borders and is a key ally in the fight against counterfeit semiconductors. Speaking in advance of the WAC day, Shinichi Ito, chair of the WSC’s Anti-Counterfeiting Task Force from the Japanese Semiconductor Industry Association said “the WAC event is a great way to highlight the global semiconductor industry’s commitment to the fight against counterfeits alongside the crucial role played by national enforcement authorities like the UK’s Border Force”.

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:

**Hendrik Abma**  
Director General  
European Semiconductor Industry Association (ESIA)  
Tel: + 32 2 290 3660
Annex 4

GAMS SEMINAR ON
GLOBAL CONVERGENCE ON ENCRYPTION LICENSING AND CERTIFICATION

October 20, 2015 San Francisco, US

Agenda Proposal (WSC)

9:00 Welcome and Introduction by the Chair (US GAMS)

9:10 WSC Report: Industry IT security challenges and benefits of global convergence (Updates since October 2014 GAMS/ Specific objectives for 2015)

9:40 Guest Speaker: CCRA/ delegate India

10.15 GAMS Report: Review of specific concerns re regulatory practices in regions, as agreed in 2014 GAMS Chair’s summary and highlighted in encryption survey

- China
- Chinese Taipei
- Europe
- Japan
- Korea
- US

11:15 Coffee Break

11.30 Round Table: Certification/licensing bodies

With a moderator and speakers from e.g. ISO, EMVco, CCRA, etc.

- Comparison of regulatory approaches, regulatory trends and common practices in WSC and non-WSC regions; updates on regulatory developments.
- Implementation of certification/licensing in each region.

Q&A session

13:00 Lunch break

14:00 Guest Speaker: Impact of IT Security encryption on new and emerging technologies

15:00 Round table: GAMS and IT Security Representatives:

- Review and define short term and longer term possibilities and actions towards convergence for Encryption, IT security standards, certification/licensing regulatory frameworks and their implementations
17:00  **GAMS Chair [US GAMS]:** Next steps - proposal for concrete GAMS cooperation  Summary and Conclusions

**Target Attendees:**

- Government information security officials and experts from each GAMS region
- Government trade officials and other Government officials matching regular GAMS attendance
- Certification/licensing Bodies and standardization experts
- Industry JSTC delegates and other industry experts