[FINAL]

JOINT STATEMENT OF THE 18th MEETING OF THE WORLD SEMICONDUCTOR COUNCIL (WSC) 22 MAY, 2014 Taipei

The world's leading semiconductor industry associations – consisting of the Semiconductor Industry Associations (SIA) in China, Chinese Taipei, Europe, Japan, Korea and the United States – held the 18th meeting of the World Semiconductor Council (WSC) today. This meeting, held in Taipei, 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 Nicky Lu, CEO and chairman of Etron Technology Inc, and chair of the host Semiconductor Industry Association in Chinese Taipei. Mr. Lu welcomed the delegates to Taipei. The other delegations attending the 18th WSC meeting – the SIAs in China, Europe, Korea, Japan the US, were chaired, respectively, by Mr. Tzu-Yin Chiu of Semiconductor Manufacturing International Corporation (SMIC), Mr. Arunjai Mittal of Infineon Technologies, Mr. Shozo Saito of Toshiba Corporation, Mr. Ki-Man Nam of SIA in Korea, and Mr. Ajit Manocha of GLOBALFOUNDRIES.

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

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 SIAs 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.

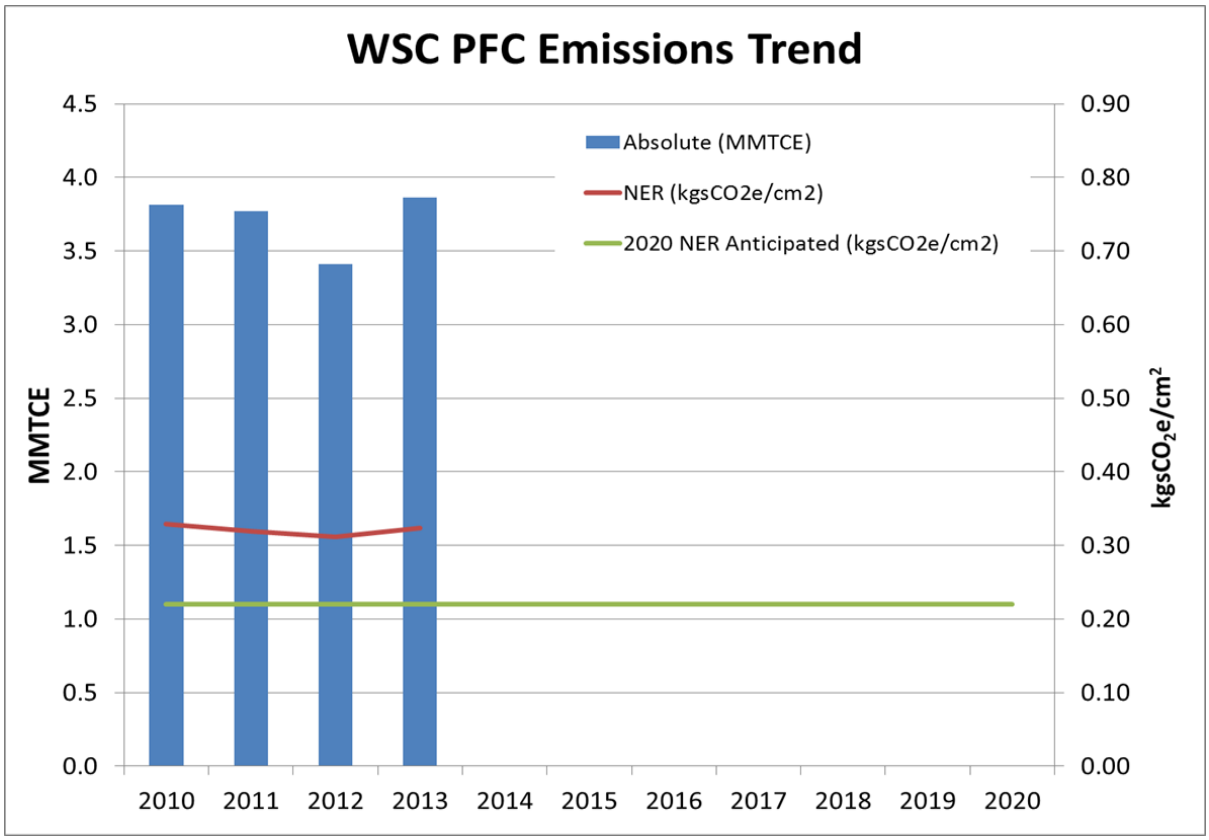
- The addition of "Rest of World" fabs (fabs located outside the WSC regions that are operated by a company from a WSC association) in reporting of emissions and the implementation of best practices for new fabs.

- A NER based measurement in kilograms of carbon equivalents per area of silicon wafers processed ($kgCO_2e/cm^2$) that will be a single WSC goal at the global level.

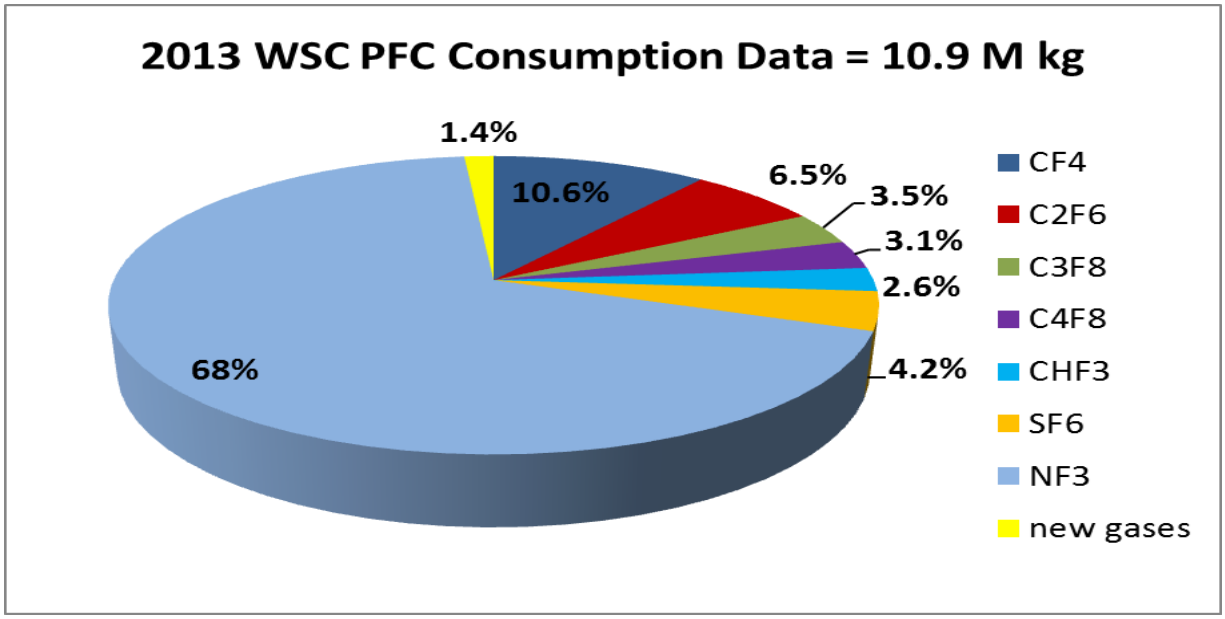
The WSC agreed to report its progress on this new voluntary agreement on an annual basis. This external reporting will provide aggregated results of the absolute PFC consumption and emissions alongside each other and NER trends. These figures represent combined emissions for the six WSC regional associations, 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 2013 report also includes the reporting of newly used gases CH_2F_2, C_4F_6, C_5F_8 and C_4F_8O. The third year results are as follows: in 2013, combined WSC absolute emissions of PFCs increased by 1.2% compared to 2010, to 3.86 MMTCE in 2013. The Normalized Emissions Rate (NER) decreased by 3%, compared to 2010 to .32kgCO2e/cm2 in 2013. Please see the graph below which compares these results to the 30% reduction in NER anticipated by 2020.

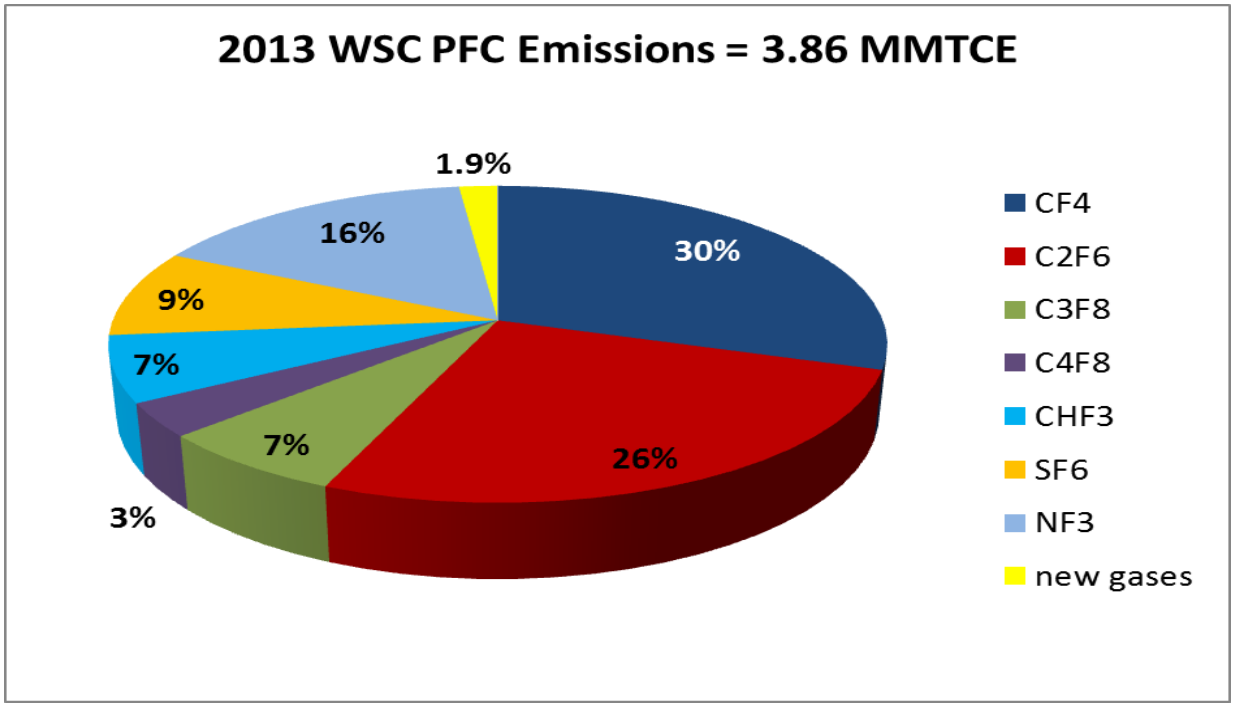
Results of WSC PFC Emission Trends



2013 WSC PFC Consumption and Emissions Data



(New gases includes CH_2F_2, C_4F_6, C_5F_8 and C_4F_8O)
(2012 WSC PFC consumption data was revised to 10.3M kg)



The WSC acknowledges the GAMS' balanced regulatory approach to greenhouse gases. The WSC welcomes the recognition in the final EU Fluorinated Gas regulation of the semiconductor industry's efforts to reduce PFC emissions and the lack of substitutes for hydrofluorocarbons used in semiconductor processing. The WSC also appreciates the balanced outcome adopted in the U.S. Mandatory Reporting Rule applicable to the U.S. semiconductor industry.

(2) Resource Conservation

In the coming years, the WSC will focus more heavily on promoting the important contribution that semiconductor devices make to the enablement of improved resource conservation in our world. Semiconductor devices enable more sustainable living, manufacturing, energy consumption and transportation in our global society. The global demand for resources will continue to grow into the 21st century and it is important to recognize the role semiconductors play to ensure that as a global community, we conserve and manage our resources more efficiently.

The WSC members are continuing to focus on resource conservation activities in the production process. 2013 normalized electricity consumption (NER, kilowatts-hour per cm^2 of silicon wafers processed) was 8% above 2010 and 33% below 2001; 2013 water normalized consumption (liters per cm^2 of silicon wafers processed) is 2.4% below 2010 and 48% below 2001; and 2013 waste normalized generation (grams per cm^2 of silicon wafers processed) was 26% above 2010 and 33% below 2001. The WSC continues to pursue environmental conservation programs in these areas and will continue to share examples of best practices.

The energy consumed in the semiconductor manufacturing process continues to be a key focus of the industry's environmental and sustainability practices worldwide. The industry's energy consumption is relatively small. However it is through the energy efficiency enabling functions of semiconductors as deployed in a wide-range of products that the energy benefits in reducing consumption throughout society are visible.

The WSC continues to focus on reducing greenhouse gas emissions and energy consumption in the manufacture of semiconductors and will work on technical aspects with our suppliers to focus on cost-effective improvements to existing tool-equipment sets and establish active and meaningful optimization goals as part of new equipment design.

(3) Chemical Management

Semiconductor manufacturing requires the use of advanced materials and specific chemicals with unique functional properties. The global semiconductor industry has achieved exceptional performance in the protection of the environment and human

health and safety. In order to maintain this high level of protection of environmental and human health while enabling advances in semiconductor manufacturing, we must continue to improve our scientific understanding of the environmental and safety attributes of newly developed chemicals and materials.

The technology roadmap for the industry, the International Technology Roadmap for Semiconductors (ITRS), indicates that the industry will increasingly rely on innovation at the nanoscale, including the use of engineered nanomaterials, to produce the next generation of semiconductor advancements. To sustain the pace of semiconductor innovation and continue to protect human health and the environment, the global industry must collaborate with Governments/Authorities to ensure that the environmental, health, and safety properties of these materials are researched and understood.

Support by Governments/Authorities for research in this area is essential to maintain the industry's record of advancing semiconductor manufacturing while continuing to protect the environment, and semiconductor workers. The WSC calls on Governments/Authorities to collaborate with the semiconductor industry and to devote sufficient environmental and safety research resources to improve the understanding of engineered nanomaterials and other novel materials in the areas of characterization methods, human and environmental toxicological mechanisms, and engineering controls to help enable future technological advancement in semiconductor manufacturing.

The WSC appreciates the support of the GAMS in regulatory harmonization efforts. The final version of the Korean REACH regulation is aligned with similar mature product requirements and is in agreement with the support requested by global semiconductor manufacturers.

Conflict Minerals

At its 17th meeting in May 2013, the WSC adopted a Conflict-Free Supply Chain Policy in order to support the global progress in addressing the sourcing of conflict minerals from conflict zones, such as the Democratic Republic of the Congo (DRC) and surrounding countries[1]. The WSC is now focused on the review and implementation process of this policy within the member associations of the WSC.

The WSC is committed to using conflict-free minerals in its products. To meet this objective, the WSC underlines the importance of a comprehensive due-diligence process aligned with other initiatives within the global industry to achieve a conflict-free supply

[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, and Uganda)

chain. The WSC is undertaking a survey with its members to ascertain and evaluate the curent status of conflict free supply chain policy implementation on this topic across the industry. The WSC will continue to promote the use of common tools, methods and standards among WSC member associations on this issue. The WSC will continue to collaborate with other organizations working on the issue of Conflict Minerals.

The WSC notes the proposal for a regulation from the European Commission in March 2014 'on setting up a Union system for supply chain due diligence self-certification of responsible importers of tin, tantalum and tungsten, their ores, and gold originating in conflict affected and high-risk areas'. The WSC notes the focus of the EU proposal for a "responsible importer" scheme for firms exercising due diligence over commodity supply chains and welcomes that the draft regulation focuses on smelters and utilizes already existing tools such as the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.*

Promoting Healthy Long-Term Growth

Semiconductors continue to pervade more and more facets of our world and our everyday lives. There are new and exciting areas where the transformative power of semiconductor technology exists.

While the semiconductor industry's potential for positive impacts in broader areas of society is promising, we must be vigilant to ensure there are no unnecessary limits or restrictions on semiconductor growth in new areas. We must also anticipate and promote new areas for growth and innovation.

Our member associations and their member companies are committed to ensuring that new growth sectors for semiconductors remain free, open, unrestricted and consistent with principles of non-discrimination. In addition, we are committed to promoting to society the benefits of building semiconductor technology into the global economy to be receptive to the innovative power of semiconductor technology for societal good, especially in the areas of increased health, safety, and efficiency.

The World Semiconductor Council can support and encourage growth in new and emerging sectors. We can do so by identifying sectors with semiconductor growth potential, and then sharing this information among leaders in these sectors, international bodies, and governments. In this way we can ensure that potential semiconductor growth in these sectors enhance global health, safety, and efficiency, while also ensuring these sectors remain free and open. **Below are three growth sectors the WSC has identified for study and analysis, along with specific recommendations to GAMS to enable growth in these areas:**

1. **Recommendations for Automotive Sector**

The WSC calls on the GAMS to:

- **Harmonize global regulations related to reducing automotive carbon emissions and increasing automotive safety.**

- **Protect spectrum allocated for Intelligent Transportation Systems.**

- **Start a dialog with international organizations such as the International Energy Agency as a means to inform regulators about the contribution that semiconductor technology can make to automotive energy efficiency and safety.**

2. **Recommendations for Energy Efficiency**

The WSC calls on the GAMS to:

- **Promote competition in electricity markets and alternative energy.**
    - **New technologies such as smart grid and smart meters are driving forces to promote competition, alternative energy and energy efficiency.**

- **Create and enhance government incentive programs to promote smart cities and smart goods.**
    - **Smart City is inter-connected, and government needs to step in to ensure there are no barriers on networking standards, interface standards, and local regulations.**

- **Promote efforts to expand the definition of green or environmental goods/products to include goods that use or incorporate semiconductors for greater energy efficiency.**

3. **Recommendations for Health Care**

The WSC calls on the GAMS to:

- **Directly engage with relevant international/multilateral organizations involved in world health (e.g., United Nations WHO, Pan American Health Organization, World Bank, UNICEF) to promote the societal benefits linked to increased use of semiconductors , such as innovations in medical devices, and advanced efficiency and effectiveness of health care. The WSC is willing to support such efforts by providing presentations to relevant organization.**

- **Identify examples of how semiconductors contribute to the provision of effective and efficient health care and opportunities for increased use of semiconductor devices in this area; China's Medicare reform developments could be referenced as an example.**

- **Explore the intersection of the increased use of wearable technology and the promotion of healthy lifestyles and disease prevention, and the opportunities for an increased role for semiconductors in this area.**

Just as the semiconductor industry has transformed computing and communications over the past decades, so too does it have the power to transform and improve other sectors of our global economy for the good of society. **The WSC asks the GAMS recognize this potential, and to help enable it by enforcing free and open markets and supporting semiconductor technology in diverse sectors, such as health, safety, and efficiency. The WSC may call on the GAMS from time to time to partner with us and support our growth initiatives in appropriate circumstances.**

Attracting Talent to the Semiconductor Industry

The world depends on the semiconductor industry for leadership on technology innovation. Innovation from the semiconductor industry enables creative solutions to critical problems facing our planet in areas such as the environment, health, energy and transportation. It enhances social and business networks and communication, and it improves the standards of living for people from all cultures around the world, in myriad ways. The semiconductor industry's continuing ability to make technology advancements is dependent on our ability to draw the best and the brightest new recruits from universities throughout the world. Our industry naturally should draw top students, as we offer unparalleled opportunities. We offer careers on the cutting edge of technology; careers that will reward creativity and international teamwork; careers that will allow recruits to grapple with exciting and important technological challenges in design and fabrication, to seek scientific breakthroughs, and to design ways to better exploit these advances in new blockbuster products that will benefit the world.

Despite these advantages, our story has not always been getting through to many students in the top tiers of academics across a range of disciplines from science and engineering to business and humanities. Top students today hear compelling recruiting claims from many competing industries such as the software, financial, banking and medical sectors.

Our member associations and their member companies are already at work developing and promoting programs at major universities to encourage top students to enter our field at the undergraduate and advanced degree levels. Many of our associations and their members are working on promoting STEM education at more junior pre-university levels. The WSC may be willing to support broader, more coordinated efforts in this

critical area. We can do so by identifying promising ideas and initiatives in promoting our sector to bright students, and then sharing this information among our worldwide membership.

In the years ahead, the World Semiconductor Council will encourage efforts to effectively convey our message to young talent around the world. We support efforts by our CEOs and senior innovation leaders to interact directly with students and universities to impart to them how important, exciting and rewarding a career in the semiconductor area can be. We also encourage members to explore best practices for attracting top talent, such as by organizing special projects, workshops, research centers and scholarships. We encourage opportunities for direct and meaningful interaction between our industry and students at universities worldwide that may help afford students practical insight into an exciting future in our industry.

Simply put, just as the semiconductor industry is crucial to continuing global technology progress, so too a steady stream of bright and creative young minds is crucial to the development of the semiconductor industry. **We ask the GAMS to recognize this critical challenge to the health of our industry and its ability to thrive and continue offering the world dramatic technological innovation, and also to recognize that the WSC may call on the GAMS from time to time to partner with us and support our international recruiting efforts in appropriate circumstances.**

International Technology Roadmap for Semiconductors (ITRS)

On the topic of the growth of the semiconductor sector, the WSC notes that it appreciates and commends the ITRS roadmap and research supporting the continuing innovation and advancement of the semiconductor industry. Since its inception, the ITRS has made an invaluable research contribution to the semiconductor industry and its ability to evolve and overcome its technology challenges.

Effective Protection of Intellectual Property

(1) Abusive Patent Litigation (NPEs/PAEs)

The WSC notes that that the Chairman's statement made at the conclusion of the 2013 GAMS meeting included the following request:

"GAMS expects the WSC to continue its work on this important issue [referring to abusive patent litigation and in particular litigation involving Non-Practicing Entities (NPEs)/Patent Assertion Entities (PAEs)] and looks forward to receiving

recommendations of the WSC, including proposed policies and legislative measures to regulate abusive litigation by patent holders including NPE/PAE in particular."

In view of this request the WSC has developed a set of recommendations addressing these concerns.

These recommendations have been developed in recognizing 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 recommends that the 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. To this end, the WSC specifically supports the following initiatives and encourages GAMS to implement them promptly:

- **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.**

(2) Utility Model Patents

The WSC strongly supports improvements to national utility model (UM) laws to bring legal certainty and predictability to UM right holders and product developers and manufacturers worldwide. In some jurisdictions, UM patents provide the same rights as utility or invention patents, but have a lower standard of patentability. This results in protection for inventions with a lower level of inventiveness. Also, in some jurisdictions UM patents may be asserted before a validity determination, shifting the burden of proof and cost to the alleged infringer to prove invalidity. However, this latter problem does not exist in those jurisdictions that require a validity determination at the cost of the holder of the UM patent.

To protect semiconductor investments and promote further innovation, the WSC calls for improvements to national utility model laws as recommended in the WSC consensus paper, "Recommendations for Improvements to National Utility Model Laws" (attached in Annex 1).

WSC calls on GAMS to take the initiative to drive improvements of national UM laws in line with the WSC's attached consensus recommendations concerning UM examinations, proper subject matter, patentability, legal enforcement, and relationship between UMs and patents.

Improvements in utility model laws will ensure an accelerated grant framework as well as legitimacy of the system in many countries and regions, thereby protecting semiconductor investments and promoting further innovation.

(3) Patent Quality

The WSC has long recognized that to maximize the beneficial effect that intellectual property protection has on stimulating and sustaining innovation, patent offices around the world should implement examination procedures that result in granting the highest quality patents possible consistent with the statutory requirements of patentability. This is of paramount importance to the WSC because the semiconductor sector is one of the most innovative and patent-intensive sectors in the global economy.

The GAMS has repeatedly affirmed its support for the continuation and deepening of cooperation between the WSC and the World Intellectual Property Organization (WIPO) to improve patent quality and also reaffirmed its support for cooperation among the Patent Offices of the GAMS parties to increase patent quality.

Mindful of this encouragement from the GAMS the WSC recognizes and appreciates the leading role that the WIPO serves in facilitating and centralizing the collection of important IP data internationally to enhance patent quality and harmonize best practices in the IP area. The WSC is cooperating with the WIPO so that it can collect,

consolidate and publish such important IP data on a comparative basis, In particular, the WSC is exploring ways to facilitate individual Patent Offices providing annually to WIPO certain standardized statistics that could bear on patent quality. **The WSC calls on the GAMS to support this effort. The WSC believes that the centralized collection and dissemination of such data would enable more refined assessment of international patent examination practices and thereby facilitate improvements in global patent quality.**

Additionally, the WSC supports efforts of the Patent Cooperation Treaty Meeting of International Authorities (MIA) and the Five IP Offices (IP5) to create common set of metrics to self-assess patent examination quality at the Patent Offices. The WSC continues to communicate with the Patent Offices and WIPO on these efforts and initiatives to improve patent quality. **The WSC welcomes the GAMS support for the patent quality initiatives and urges the GAMS to take note of and encourage appropriate respective patent office representatives to affirmatively address this goal on metrics.**

(4) Trade Secrets

The World Semiconductor Council is concerned about the adequacy of existing trade protections globally, and has been studying current legal protection of semiconductor trade secrets, both formally and as practically applied. At its September meeting in Jeju, the GAMS noted the WSC's concerns in this area, and stated that it would endeavor to find ways to advocate for enhanced trade secret protections in trade agreements and domestic laws.

Trade secrets represent core business assets in the semiconductor industry. Trade secret protection affects the competitiveness of companies, and misappropriation can have a critical detrimental impact on future revenue and profit. Accordingly, effective trade secret protection promotes private investment and innovation, and ineffective protection has the opposite effect.

Inadequate trade secret protection can also inhibit free trade. 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."

There are difficulties in enforcing trade secrets especially as related to gathering evidence of theft. Unlike other areas of IP, key evidence of misappropriation is not always readily available, and the burden is on the rights holder to produce such evidence, particularly with respect to inevitable disclosure when an employee departs one entity to work for a competitor. Enforcement of trade secret rights against a third-party inducer (the hiring entity of a departed employee) is often

difficult and remedies against an ex-employee are often inadequate. Also, sanctions are often lenient and thus do not act as a deterrent. The cloud computing environment may make trade secret protection even more unpredictable.

The WSC believes that more effective global trade secret protection is an important objective, and can be pursued consistent with employees' ability to choose their employers. It continues to study current legal protections and best practices on trade secrets, as well as problem areas where protections may not be effective. The WSC intends to work with the GAMS to pursue this important objective.

In the interim, the WSC renews its calls upon the GAMS to advocate for enhanced trade secret protections in trade agreements and domestic laws.

(5) Respecting License Agreements in Bankruptcy

Semiconductor companies license intellectual property (IP) in order to improve their products by incorporating other companies' technologies or processes. Semiconductor companies also enter into cross-licensing agreements for each other's IP to enable freedom of operation by protecting their massive investments in research, development, and manufacturing from litigation arising from a web of interrelated semiconductor patents. Such agreements encourage investment in the development and production of new technologies that benefit consumers around the globe.

To allow a bankruptcy trustee or judge to cancel an existing license agreement over the objection of the licensee and require either a renegotiation of the license agreement or sale of the intellectual property to a buyer who in turn could seek a new license agreement has significant negative consequences to legitimate businesses, competition and consumers. Such a cancellation could force the licensee to not only pay twice to license the same technology, but also potentially force the licensee to pay far in excess of what the parties could have agreed to when the original licensing agreement was reached. This could be the result because for example if, at the time of design, the licensee or innovator has a number of implementation options, but after the design is in production switching to an alternative is more difficult. Ultimately these costs are borne by consumers in the form of higher prices or fewer products/technologies available.

The WSC recommends that GAMS members take measures to ensure a licensee's decision to have agreements remain in effect is respected even if one of the licensors files for bankruptcy.

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 Anticounterfeiting Task Force with the aim of reducing and eliminating counterfeited semiconductors on the global market.

In furtherance of this commitment, and to address GAMS' request for best practices in this area, the WSC has issued a White Paper entitled "Winning the Battle against Counterfeit Semiconductor Products." This White Paper and its accompanying slide set provides a comprehensive overview of the dangers posed by counterfeit semiconductors, concrete examples of risks created to health, public safety and critical infrastructure, and regional strategies and initiatives to combat the proliferation of counterfeits, including encouraging purchasing from authorized sources rather than brokers with unknown sources of supply.

The WSC seeks further cooperation with GAMS, GAMS customs and enforcement agencies, as well as organizations such as the United Nations Office on Drugs and Crime (UNODC) and World Customs Organization (WCO) to stop counterfeits at the borders and vigorously prosecute those that make and distribute counterfeits. WSC plans to share the Anticounterfeiting White Paper with these organizations.

The WSC calls on GAMS members to continue to implement appropriate measures (including domestic, bilateral and multilateral countermeasures) to deal with counterfeit semiconductors. The WSC encourages GAMS members to share the WSC Anticounterfeiting White Paper and 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 2014 GAMS meeting. The WSC also welcomes the GAMS agreement at the Jeju 2013 GAMS meeting to work with their customs and law enforcement authorities agencies to intensify the implementation of IPR enforcement measures, including information sharing activities, aimed at combatting the trafficking of counterfeit semiconductors.

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

Free and Open Markets

(1) Multi-component ICs

The WSC calls upon GAMS to continue to facilitate the growth of the semiconductor market by ensuring free and open markets by eliminating tariffs and non-tariffs barriers for all semiconductor products including new types of semiconductor products such as multi-components ICs (MCO).

The WSC re-iterates that an expeditious duty free agreement on MCO-products based on the six-party WSC consensus definition - which was agreed by five out of six GAMS members in 2012 and re-confirmed in 2013 - is of the highest priority.

The WSC appreciates the ongoing efforts of the governments and authorities to achieve duty free treatment for MCOs via expansion of the International Technology Agreement (ITA), which is aimed to be concluded in 2014.

The WSC is encouraged by the progress made at the May APEC meeting to reduce the differences among parties and to keep the dialogue open. WSC welcomes the commitment from key participants to find creative solutions toward concluding a commercially significant and balanced agreement in the shortest timeframe possible.

The WSC calls on GAMS Members together with all ITA parties to take immediate actions to enable a rapid conclusion of an ambitious ITA expansion that includes MCOs by end of this year.

Any agreement eliminating tariffs on MCOs should also provide for an annual review mechanism to keep the duty-free treatment of MCO's current in terms of coverage of commercially available MCOs.

The WSC calls on GAMS to continue their dialogue on this issue, and requests that GAMS will report also outside the regular GAMS meeting to the WSC on their assessment of the progress made in the ITA expansion negotiations. The WSC also calls on GAMS to engage in dialogue on an ad hoc basis outside of official GAMS meetings, and consider all possible means to rapidly achieve duty free treatment for MCOs.

The WSC welcomes the vote by the Harmonized System Committee in favour of amending the Harmonized System to include MCOs under HS heading 8542 for integrated circuits in the 2017 Review Cycle. Including MCOs under a single heading as part of the 2017 HS Review will ensure that the HS system stays current with technology advances in semiconductors and to facilitate trade by avoiding the unnecessary complexity that would result if these products were not classified under a

single heading. Any delay to this amendment would represent a serious missed opportunity to bring the WCO nomenclature in line with current technological advancement to the detriment of the semiconductor and its downstream industry.

The WSC respectfully reiterates its request to GAMS to take the necessary steps for MCO inclusion into the HS2017 and encourage other WCO parties to support inclusion of MCOs.

The WSC will continue to work towards a consensus definition to include semiconductor sensors, actuators, resonators and oscillators in the general category of discrete semiconductors - HS 8541 - of the Harmonized system in the future review cycle and **requests GAMS to support this process.**

(2) Encryption

The WSC, in line with the WSC Encryption Principles developed since 2009, welcomes and endorses the GAMS commitment to help ensure that global markets are open and free from unnecessary regulation and discrimination related to encryption used in commercial ICT by encouraging the adoption of international voluntary standards and norms including encryption algorithms. The GAMS commitment is essential to avoid fracturing the global digital infrastructure and creating unnecessary obstacles to trade.

The WSC further welcomes the GAMS decision to organize - in October 2014 - a seminar on encryption technologies used in commercial ICT and information security involving industry and, on the government/authorities side, both trade officials and relevant information security experts. The seminar should be the first step of a structured dialogue to discuss specific WSC concerns on the regulation of commercial encryption.

Specific objectives of the seminar include:

- Enhancing the cooperation and exchange of experience and information between officials in the fields of information security and trade and other relevant experts with an aim to ensure free and open markets

- Identifying and bridging the gaps between the WSC Encryption Principles and practices

- Government/Authorities commitment for an action plan to resolve market access issues

- Addressing where barriers are coming from

Further, the WSC hereby presents to GAMS its proposal for the agenda for the seminar and a list of organizations which should attend the seminar (Annex II).

An industry survey covering the 2012-2013 timeframe has been conducted on the regulatory and policy frameworks and practices for commercial encryption in the WSC regions. At this time, the WSC has not fully completed all section of the survey, but is continuing efforts to reach completion. The WSC will share the survey and its results with the GAMS prior to the October 2014 seminar. In the survey responses, serious concerns were voiced by several associations relating to restrictive regulations and licensing/certification requirements and procedures in certain countries and regions.

Some of the concerns expressed include:

- Unpredictable and non-transparent Government/Authority licensing and certification procedures

- Extensive licensing requirements within complex restrictive legal framework for commercial encryption that create legal uncertainty for non-indigenous companies.

- Requirement in certain countries to use specific card operating system for certain applications

- Trend towards the optional adoption of national encryption standards eventually leading to de-facto restrictions in the commercial market

These concerns are in addition to those already raised in the 2013 WSC statement as follows:

- Lack of stakeholders consultation on ongoing reviews of regulations on encryption

- Difficulties in obtaining the needed algorithms and licenses necessary for import, production, or sale of commercial products or applications with cryptographic capabilities

- Unjustified difficulties in meeting license requirements

- High administrative burden, unpredictable process and procedures and cost of certification

- Concerns with certifications where only domestic companies can apply to be certified or meet the requirements, or could be favored

- Concerns with encryption standards being turned into technology mandates

Prior to the GAMS encryption seminar, the WSC will provide full feedback on concerns with practices and regulations that are not in line with international practices for commercial encryption and contradict the WSC principles & best practices on encryption, relevant GAMS commitments, and relevant WTO principles. **The WSC recommends that GAMS members, including their information security officials, examine these concerns during the GAMS Encryption seminar in October 2014.**

In addition, GAMS should continue a structured dialogue after the seminar in order to follow up on commitments taken during the seminar.

The WSC calls on GAMS to continue their efforts to ensure that all GAMS and WTO members observe the WSC principles and those set forth herein.

The WSC will continue to monitor and analyze the gaps between the WSC Encryption Principles and applicable laws and regulations, including relevant data on administrative and regulatory practices and evolutions on certification rules for encryption used in domestic commercial markets.

GAMS' efforts to increase accessibility, transparency, non-discriminatory and open procedures and rules will help our industry to ensure compliance with the WSC Encryption Principles going forward and will help to keep markets opened, allowing innovation and digital economy to flourish.

(3) Worldwide Customs & Trade Facilitation

The WSC reaffirms the key importance of trade facilitation in achieving free and open markets, reducing barriers to trade, lowering costs, improving business conditions, enhancing IT, and promoting global alignment, to the benefit of governments, industry, and consumers alike.

Support for WTO Agreement on Trade Facilitation

WSC members applaud the conclusion of the WTO Agreement Trade Facilitation in the ministerial meeting of the World Trade Organization in Bali, and extend sincere 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. In assessing the agreement, the WTO has noted

that "the benefits to the world economy are calculated to be between $ 400 billion and $1 trillion by reducing costs of trade by between 10% and 15%, increasing trade flows and revenue collection, creating a stable business environment and attracting foreign investment."

With the conclusion of the WTO Agreement on Trade Facilitation, the WSC encourages GAMS and all the other members of the WTO to act expeditiously on several fronts. These include ratifying the agreement, ensuring its formal inclusion in Annex 1A of the Marrakesh treaty establishing the WTO, implementing the specific customs and trade provisions of the agreement, and making certain that the implementation process takes account of both government and business equities. Coordination between both government and private sector stakeholders will prove especially important as the WTO and its member countries have established a trade facilitation committee for purposes of putting the agreement's provisions into practice.

To further reduce the administrative burden and compliance efforts for the semiconductor industry, **the WSC recommends that GAMS consider working with their customs services to address the below additional concerns which partially go beyond the scope of the WTO Trade Facilitation Agreement.**

Harmonization of Customs Classification Interpretations

At its 2013 meeting, the WSC stated that it would study cases of different HS (Harmonized System) subheading classifications of identical products, and explore the merits of harmonization and simplification. The WSC has found that identical semiconductor products are classified differently e.g. when such products contain more than one transistor, diode, or other component classified under HS 8541.

The WSC recommends that GAMS members agree to address existing different interpretations of the Harmonized System for semiconductor products and start by working with industry to harmonize articles identified in the WSC study of different interpretations. The discussions should also explore various means to achieve harmonization such as discussing with WCO or adding interpretation notes to Chapter 85 of a region's Harmonized Tariff Schedule.

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

The WSC looks forward to working with GAMS HS classification experts to discuss different interpretations and the application of the HS rules of interpretation in the context of evolving semiconductor and integrated circuit technologies. As one example, the working group could consider as a starting point for discussion on the existing different interpretation which products should be considered under HS8541.

Enhanced Benefits for Authorized Economic Operators

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 from the GAMS regions, including Mutual recognition of AEO status by Customs administrations.**

Adoption of IT International Standards

The use of non-standard, country-specific or agency-specific data is highly inefficient in terms of cost and accuracy for both government and industry. Governments and authorities are required to maintain or develop agency specific systems and industry must develop and maintain interfaces for these redundant and duplicative reporting requirements. For global traders such as semiconductor companies, who must interact with many Customs administrations, the burden associated with meeting these requirements is very significant.

Therefore, the WSC calls on GAMS members to promote increased and workable adoption of the international IT standard known as "WCO Data Model"[2], as this would benefit trade and industry by enabling increased interoperability and integration among all parties in the supply chain, by improving international Government-to-Government, Government-to-Business and Business-to-Business data sharing and re-use of data and by promoting the establishment of a single window environment for customs.

(4) Export and/or Import Regulatory Restrictions

The WSC takes note of the importance of basic and fundamental research projects to innovation in semiconductors, including research collaboration with leading universities

[2] Under the conditions that the required data are limited to minimum necessary; that international data exchange between economic operators and between customs administration become increasingly possible; and that using international data standards [harmonized data interfaces] are used.

and research institutes. It also takes note of the growing use of research projects that are multi-national in scope. In this connection, **the WSC calls on GAMS to promote enhanced training on export controls.**

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 in 2013 the semiconductor market ended with a 4.8% annual growth and reached a new record high value of 306 Billion US$ after a dip in 2012. The YoY (year over year) highest growth regions were US and Asia/Pacific. Asia/Pacific contributed the largest portion with China taking almost half of it. In terms of product types, logic maintained the largest segment while sensors, driven by automotive, consumer and communication, posted the largest five-year (2008~2013) Compound Annual Growth Rate. With respect to applications, communication and automotive continued to gain share of the market, whereas computer unchanged and other segments slowing.

Trasfer Pricing: OECD BEPS Action Plan

The WSC notes that the Organization for Economic Cooperation and Development (OECD) is seeking future changes to transfer pricing guidelines and base erosion and profit shifting (BEPS), as indicated in the release of several documents in July 2013, including: *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* ("**TPGs**")—a *Revised Discussion Draft on Transfer Pricing Aspects of Intangibles* ("**RDD**") ; a *White Paper on Transfer Pricing Documentation* ("**White Paper**") ; and *Action Plan on Base Erosion and Profit Shifting* ("**BEPS Action Plan**").

These initiatives are very important for the global semiconductor industry because (a) most OECD member countries use the TPGs in establishing transfer prices between related companies; and (b) the TPGs are used to determine transfer pricing as allowed under many tax treaties based on the OECD model tax convention ("**MTC**"). Multinational semiconductor companies will be affected by these initiatives.

The WSC urges GAMS to ensure that changes related to the OECD BEPS project be enacted based on the existing international principles of the arm's length standard and residence- vs source-based taxation, do not create excessively onerous transfer pricing documentation requirements, and avoid an increase in disputes.

The WSC will endeavor to provide more detailed recommendations to the GAMS prior to the 2014 GAMS meeting.

Regional Stimulus

While WSC supports appropriate stimulus measures by the respective governments and authorities, WSC confirms its views 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 interventions 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 will continue to discuss and endeavor to achieve a better understanding of appropriate structure for a consultation procedure that would be beneficial to the semiconductor industry.

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 16, 2014 in Fukuoka, Japan.

Next Meeting

The next meeting of the WSC will be hosted by the Semiconductor Industry Association in China, and will take place in Hangzhou on May 21, 2015.

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 Chinese Taipei:
http://www.tsia.org.tw

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 I: World Semiconductor Council Recommendations for Improvements to National Utility Model Laws

Examination of Utility Model Applications or Registered Utility Models

Background: Substantive examinations of utility model applications, if any, vary among the different jurisdictions.

Recommendation: It is recommended that Utility Model applications be examined before registration, or (not examined) registered Utility Models be or can be made subject to a revocation procedure at the respective PO before they are enforced in court.

Proper subject matter for a UM

Background: In most jurisdictions, the subject matter that is eligible for UM protection relates to an intended narrow category of shapes and/or structures of products, including mechanical structures. The intent of UM protection is to cover more trivial, incremental improvements in simple devices. However, there are many different interpretations of the definition that often result in expansion of the subject matter that is made eligible for UM protection. For example, the claims of a UM application that are directed to the function of a product (which is protectable by patent laws), should not be granted, as they are not within the limited scope of subject matter eligible for UM protection in those jurisdictions.

Recommendation: Keeping in mind the intended narrow category of eligible subject matter (i.e. limited to shapes and/or structures of products and not extended to include claims to the function of a product), improved UM systems should ensure that a UM application is claiming eligible subject matter, limited to the foregoing scope prior to granting/registering of the UM. This should also include more comprehensive training for the examiners of UM applications and the publication of clear guidelines for the public to better understand what the eligible subject matter is for UM protection.

Patentability

Background: Patentability standards and timing of examination vary among the different Patent Offices (POs). Many of the POs conduct a cursory review of the UM application and make a novelty determination without conducting a prior art search, before granting/registering the UM. In a few cases, other POs conduct a full examination (i.e. novelty and inventive step) before granting the UM. Although the test for novelty is quite consistent in the various POs (with some differences as to what constitutes prior art), the inventive step test varies among the POs. Some POs use the same inventive step test as that used for a regular patent, but in recognition of the objective of the UM

system, namely to provide quick, low cost protection for trivial innovation, most of the other POs use a lower standard for the inventive step test.

Recommendation: Keeping in mind the objectives of UM systems, national UM laws should strive for consistent standards of novelty and inventive step, including a common definition on what constitutes prior art, for a valid UM; but recognize and accept those UM systems that use the same standards of patentability as those used for patents. If the national UM law only requires review of a UM for novelty before granting it, there should be a requirement to conduct a prior art search and use the results from that search to make the novelty determination. If the national law allows for an inventive step test that is different (i.e., a lower standard than the inventive step test for a regular patent, the national law (which should also include corresponding implementing regulations and examiner guidelines) should provide clearer and more specific guidelines and training to Examiners on the specific definition of the inventive step test, the inquiries that need to be made and answered to apply the test, and clear notice to the public on the definition of the test and application thereof.

Enforcement

Background: There is concern for the UM systems that allow UM holders to assert their UMs before full examination and shift the burden of proving invalidity, and the associated expense, to the alleged infringer. There is also concern that for UM systems that have a lower standard of patentability, namely a lower inventive step standard than that for a regular patent, remedies should be less than those for a patent.

Recommendations: For jurisdictions that do not require substantive examination of the UM application prior to registration, a procedure for requesting examination and/or revocation of the registered UM should be available at the respective PO before enforcing of a registered UM in court. The remedies for Utility Models that are examined using a lower standard of patentability than that of a patent, should be limited as follows: damages should be less than those for a regular patent (e.g. nominal or statutory) and there should be no injunctive relief. In case the UM right is invalidated, in an invalidity proceeding brought by the alleged infringer, the costs, including reasonable attorney fees, of the validity determination proceedings should be shifted to the UM owner.

Infringement actions should be within the exclusive jurisdiction of the court system (and can include specialized patent courts) and invalidity determinations may be within the jurisdiction of both the courts and administrative agencies (i.e. POs).

Relationship of UMs and Patents

Background: Some countries allow the seeking of both UM and Patent protection, and allow the UM filing date to serve as the filing date of the subsequently filed patent

application. Recommendation: To be consistent, UM laws could provide that a UM cannot be asserted after a patent has been granted for the same application. In case a patent for a certain application is not granted, a corresponding valid UM can still be asserted.

GAMS Support for Improvements in Utility Model Laws

Background: There is strong support among the WSC membership for improvements to national UM laws which would bring more legal certainty and predictability to UM holders and product developers and manufacturers.

Recommendation: GAMS should take the initiative to drive or recommend improvements of national UM laws in line with the other recommendations in this paper.

<u>Annex II:</u> GAMS Seminar on Commercial Best Practices in Encryption Licensing & Certification

Agenda and participant list proposal

1. Agenda Proposal

MORNING SESSION	
09:00-09:10	1. Welcome by GAMS Chair – introduction (tour de table)
09:10-10:00	2. Presentation by WSC • Introduction on WSC Free Trade principles & Encryption principles • Best practices and related GAMS commitments (including global deregulation trends on encryption) • Seminar's objectives and industry expectations • Results of JSTC encryption survey and issues encountered by industry
10:00-10:30	3. International regulatory framework • Relevant international agreements and trade rules (WTO, GATT and TBT, CCRA, including experience by member country) ○ Guest speaker: CCRA and expert
10:30-10:45	Coffee break
10:45-13:15	4. Presentations by relevant public certification bodies, licensing authorities, • Theme one: regulatory framework and standards • Theme two: licensing & certification schemes and methods in place • Theme three: Procedures and statistics on acceptance of certifications requests (domestic and foreign applicants) • Theme four: Issues encountered by local industry to be certified abroad a) China b) Chinese Taipei c) Europe d) Japan e) Korea f) United States
13:15-14:30	*Lunch break*
AFTERNOON SESSION	

14:30-16:00	5. Open discussion • Perspective by industry delegations • Perspective by Government/Authorities (i.e. representatives from GAMS and from certification and licensing bodies) …on above four themes (see point 4)
16:00-17:30	6. GAMS representatives including (and) experts from certification/licensing bodies and industry • Discussion on application of WSC encryption principles • Discussion on issues encountered by industry and on above four themes • Preparation of joint recommendations/conclusion/proposals on next steps
17:30-18:00	7. Presentation by Chair of Joint Recommendations/proposals for next steps
18:00 -18:15	8. Concluding remarks by WSC

2. Target participants

- Industry JSTC level, industry experts
- Government information security officials/experts
- Government trade officials and other Government officials matching regular GAMS attendance
- CCB/Public Certification Body level, and standardization experts

WSC proposal to GAMS for seminar attendance:

Global

- Common Criteria Recognition Arrangement (CCRA) www.commoncriteriaportal.com
- Indian Common Criteria Certification Scheme (IC3S) http://www.commoncriteria-india.gov.in/

Chinese Taipei

- Information and Communication Security Technology Center http://www.icst.org.tw/ and National Information and Communication Security Taskforce
- GAMS

China

- SEMB/OSCCA www.oscca.gov.cn
- China Information Security Certification center / CNITSEC IS CCC
- MIIT
- GAMS

Europe

- SOGIS http://www.sogisportal.eu/ (and in particular SOGIS Members from Germany and France and JHAS)
- GAMS

Japan

- JISEC - Japan IT Security Evaluation and Certification Scheme http://www.ipa.go.jp/
- GAMS

Korea

- IT Security Certification Center(ITSCC) http://itscc.kr
- GAMS

US

- NIST http://www.nist.gov/
- Treasury http://www.treasury.gov/
- OSTP http://www.whitehouse.gov/administration/eop/ostp
- GAMS + USTR