Subsidiary Body on Implementation (SBI)

Submission of Nauru on behalf of

The Alliance of Small Island States

Views and information on elements to be included in the recommendations on loss and damage in accordance with decision 1/CP.16

28 September 2012

Nauru welcomes this opportunity to present the views of the 44 members of the Alliance of Small Island States (AOSIS), in response to the invitation to Parties to submit to the Secretariat, by 17 September 2012, their views and information on the possible elements to be included in the recommendations on loss and damage in accordance with decision 1/CP.16. See UNFCCC decision 7/CP.17, paragraph 9.

1. Recommendations to the COP on loss and damage

The absence of a mechanism under the UNFCCC process to comprehensively address the loss and damage to the world's most vulnerable developing country Parties from human-induced climate change is a gaping hole in the international climate change regime. This is a gap that must be closed as a central outcome of the AWG-LCA's work under Section 1 (c) the Bali Action Plan.

Current approaches discussed under the UNFCCC have focused primarily on risk management in the context of disaster risk reduction, ignoring the need for the international community - and the UNFCCC specifically - to directly address and redress loss and damage to small island developing States (SIDS), Least Developed Countries (LDCs) and other developing countries particularly vulnerable to the adverse impacts of climate change caused by increasing greenhouse gas emissions.

Rather than taking a piecemeal approach to the needs of the most vulnerable developing country Parties, a holistic approach is needed, bringing together tools to address adaptation, financial risk management and risk transfer, and loss and damage in a single mechanism that can comprehensively minimize and address the loss and damage from the impacts of climate change that cannot be avoided.

Against a backdrop of increasing emissions and accelerating impacts, a centralised mechanism at the international level, under the UNFCCC, is needed, *inter alia*:

- to provide leadership and build trust amongst the multiple stakeholder groups involved;
- to ensure the efficient development and operation of approaches to address loss and damage; and

• to marshal the level and types of expertise required to address the immense and complex problem of loss and damage.

Accordingly, it is now appropriate for SBI to recommend to COP 18 to adopt a decision in Doha establishing an international mechanism to address loss and damage with three mutually-reinforcing components, as detailed in earlier AOSIS submissions to the COP and AWG-LCA:¹

- An **Insurance Component** to help SIDS and other particularly vulnerable developing countries manage financial risk from increasingly frequent and severe extreme weather events;
- A **Rehabilitation/Compensatory Component** to address the progressive negative impacts of climate change, such as sea-level rise, increasing land and ocean temperatures, and ocean acidification; and
- A **Risk Management Component** to support and promote risk assessment and management tools and facilitate and inform the Insurance Component and Rehabilitation/Compensatory Component.

The decision establishing the mechanism should give guidance on the governance and functions of the mechanism so that the newly-established body can start work immediately. With respect to governance, the mechanism should be situated under the umbrella of the Convention and housed within the UNFCCC Secretariat, where the administrative support can be provided. A Board would provide oversight, through a transparent governance structure. Institutional arrangements would identify technical, financial and administrative functions of each component. This new body will be unique in its reliance on specialised technical expertise and in its linkages to the work of other constituted bodies under the Convention.

2. Role of each component

The three components of the mechanism are inter-dependent and all three are needed as part of an integrated and comprehensive approach to minimizing and addressing loss and damage in SIDS, LDCs and other developing countries particularly vulnerable to climate change impacts.

The UNFCCC currently lacks a framework for comprehensively addressing permanent loss and damage. Existing approaches are restricted to risk management in the context of disaster risk reduction (DRR), which leaves many climate-related hazards completely unaddressed. An international mechanism to address loss and damage, with the three components below, will fill an existing void under the UNFCCC.

¹ See Alliance of Small Island States (AOSIS), Proposal to the AWG-LCA, *Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts*, available at, http://unfccc.int/files/kyoto_protocol/application/pdf/aosisinsurance061208.pdf.

A. The insurance component

The insurance component is needed to assist SIDS, LDCs and other developing countries that are particularly vulnerable to the impacts of climate change in better managing financial risks associated with increasingly frequent and severe climate-related extreme weather events. These include hurricanes, tropical storms, storm surge, floods and droughts. These events already result in significant loss or damage and many hazards will be exacerbated by climate change.

The UNFCCC technical paper on physical impacts notes that SIDS are already experiencing an increase in the intensity and frequency of various extreme events, such as heavy rainfall, drought, high air and ocean temperatures, strong winds and storm surges and the capacity of SIDS to cope with these events is being increasingly exceeded.² Some regions of the world, for example Pacific Islands, have limited access to commercial risk sharing and risk transfer products, due to insurance markets that are small or difficult to establish, resulting in market failure. In other regions, where insurance is available, SIDS and many other vulnerable countries find it increasingly difficult to afford commercial insurance due to the burden of increasing risks due to climate change.

An international mechanism that pools the risks from all vulnerable countries will bring benefits to all through a spreading of the risks among a larger number of countries. New and innovative insurance tools in addition to, or in conjunction with insurance pools, can help manage, spread, hedge, reduce and transfer the increasing financial risk associated with climate-related hazards, if appropriate expertise and financing to design and support this work is marshalled and coordinated at the international level. It is increasingly clear that these solutions will not be forthcoming from the private sector for the benefit of SIDS and LDCs without intervention at the international level.

B. The rehabilitation/compensatory component

This component is needed to address the progressive negative impacts of climate change, such as seal level rise, increasing sea and land temperatures and ocean acidification that result in loss and damage (e.g., permanent or extended loss of useful and, damage to coral reefs, damage to water tables, loss of fisheries, etc.).

Even with a range of new and innovative risk transfer mechanisms (made possible through the insurance component), and with risk reduction measures in place (through the support of the risk management component) a measure of loss and damage will remain and must be addressed by the international community. The UNFCCC technical paper on managing risk notes that "even with the successful development and deployment of existing and new risktransfer mechanisms, the vulnerable would still be at risk from climate hazards. Owing to the increased interdependence of global economy and society, impacts in poor and vulnerable regions could cascade throughout the world. It would therefore be cost-effective as well as equitable for the international community to contribute to managing these risks." The Technical Paper notes in this regard AOSIS's earlier proposal for an international insurance pool "to be funded by developed countries to compensate small-island and

² FCCC/TP/2008/3, para. 55.

low-lying developing countries for the otherwise uninsured loss and damage from slow-onset sea level rise."³

The existing approaches to risk management and risk transfer that have been considered by the recent UNFCCC regional workshops show *inter alia* that there is a significant gap in the availability of approaches now established to deal with slow onset events and permanent loss. Given the reality of climate change and its current and potential impacts, it is necessary that provision be made for addressing such losses, especially as the vulnerable developing country Parties that will be most impacted, including SIDS, have contributed little to the GHG emissions that are the cause of these impacts. In such circumstances, an international response is required and the UNFCCC is the institution best placed to lead such an international response.

C. The risk management component

This component is needed to provide both technical and financial support to risk reduction efforts in connection with climate-related extreme weather events. It would also facilitate consideration of ways to reduce risk from the impacts of progressive negative impacts of climate change that result in loss and damage, including sea level rise, increasing sea temperatures, increasing air temperatures and ocean acidification, which have impacts on coastal infrastructure, shorelines, coral reefs etc. This component would work closely with the other two components.

Given the inter-relationships that exist in the climate change context between risk prevention and management, risk transfer, and the incidence of permanent losses, it is best that all three aspects be addressed in one International mechanism under the Convention, with separate, mutually reinforcing, windows for addressing each component.

3. Demonstrated need for an international mechanism to address loss and damage

The COP has an ample scientific and policy information base upon which to establish an international mechanism to address loss and damage to the adverse effects of climate change.

As far back as 1991, when the UNFCCC was still being drafted, AOSIS highlighted the need to address climate-related loss and damage for the most vulnerable Parties, and proposed the establishment of an international insurance pool as a collective loss-sharing scheme to compensate victims of projected sea-level rise. The scheme was to be funded by mandatory contributions from industrialised countries based on GNP and on relative greenhouse gas (GHG) emissions, i.e. contributions to the fund would be based on ability to pay as well as responsibility. The proposal used other international law precedents as a model for its design. The basic concept of the 1991 AOSIS proposal is still valid, though the needs AOSIS highlighted in 1991 have not yet been satisfactorily addressed.

³ FCCC/TP/2008/9 at 13.

In May 2003, two UNFCCC workshops explored insurance-related actions under the UNFCCC. The background paper prepared for those workshops identified various international law precedents for the use of insurance tools and collective loss-sharing schemes to address transboundary environmental damage, as well as the role insurance tools might play in managing, hedging and transferring risk from climate change impacts through collective-loss sharing mechanisms.⁴ These two workshops acknowledged the role of the international community in contributing to loss sharing from climate-related impacts at local, national and global level⁵ and the workshop report noted, *inter alia*, that "no insurance programmes aimed at covering property losses of the poor due to climate hazards are likely to be viable without government subsidy, especially in the least developed countries (LDCs), where a case may be made for burden sharing and risk transfer internationally via an international insurance pool, as was originally proposed by AOSIS."

In 2008, a technical paper on financial flows prepared by the Secretariat recognized that it would be cost-effective as well as equitable for the international community to contribute to managing the risks of climate hazards.⁶ Other technical papers, produced in 2008 in response to mandates from the Parties, have made much the same point noting the extreme vulnerability to climate change of many developing country Parties, in particular SIDS and LDCs, and identifying possible approaches to address these challenges with appropriate international support. See:

- Physical and socio-economic trends in climate-related risks and extreme events, • and their implications for sustainable development, which pays particular attention to vulnerable developing countries, especially least developed countries and small island developing states (FCCC/TP/2008/3)
- Integrating climate risk assessment and management and disaster risk reduction strategies into national policies (FCCC/TP/2008/4)
- Mechanisms that can be used to manage financial risks from direct impacts of climate change (FCCC/TP/2008/9)

Technical paper FCCC/TP/2008/3 on climate-related risks and extreme events highlighted the unusually high susceptibility of SIDS to climate risk. It noted the unique vulnerabilities of SIDS to current and future impacts of climate change related to sea level rise, high air and ocean temperatures, and an increase in the intensity and frequency of various extreme events, such as heavy rainfall, drought, strong winds and storm surges, and that the capacity of SIDS to cope with these events is being increasingly exceeded. The paper noted, inter alia, that the vast majority of infrastructure and industry in SIDS tends to be located close to the coast; hence SIDS face higher costs per capita from climate-related risks and extreme events.

Technical paper FCCC/TP/2008/4 on the integration of practices, tools and systems for climate risk assessment and management and strategies for disaster risk reduction into

⁴ Background paper: Insurance-Related Actions and Risk Assessment in the Context of the UNFCCC.

http://unfccc.int/files/meetings/workshops/other meetings/application/pdf/background.pdf

⁵ See UNFCCC, Report on the UNFCCC workshops on insurance (FCCC/SBI/2003/11), available at http://unfccc.int/resource/docs/2003/sbi/11.pdf

UNFCCC, Investment and financial flows to address climate change: an update

⁽FCCC/TP/2008/7, p. 6, available at http://unfccc.int/resource/docs/2008/tp/09.pdf.

national policies and programmes, focused on the role of disaster risk reduction in adaptation. It nevertheless recognized that adaptation is a broad concept that addresses a wide range of risks, not only associated those with disasters, and that "*the progressive drying out of continental interiors, the melting of glaciers, sea level rise, changes in ecosystems, including extinction of species, and the salinization of groundwater are examples of climate-related risks that do not manifest themselves in the form of rapid disasters. Similarly, the economic sectors, livelihoods, stakeholders and decision-makers involved in adaptation are not synonymous in all cases with those involved in DRR."⁷ The paper explained that while it focused on those risks that manifest in the form of climate-related disasters, and while responding to disaster risk is an aspect of adaptation that should be addressed as a priority, adaptation also addresses other negative consequences that were not considered in this paper.*

Technical paper FCCC/TP/2008/9 addressed mechanisms that can be used to manage financial risks from direct impacts of climate change in developing countries. It explicitly considered the unique circumstances of the most vulnerable developing countries, especially LDCs, SIDS and countries in Africa, and looked at the design of appropriate mechanisms to manage financial risk, bringing together inputs from technical experts in the fields of insurance, reinsurance, and hazard assessment. The paper recognized though that while vulnerability to climate change hazards can be reduced to a certain extent by measures to promote resilience, adaptation and disaster risk reduction, this still leaves residual hazards caused by climate change, in addition to that which societies would have experienced from natural climate variability.⁸ To manage climate change hazards, a toolkit of approaches can be used, including risk reduction measures, resilience building, risk pooling and risk transfer.⁹ Risk pooling requires the facilitation of access to insurance-type structures for the most vulnerable and risk transfer requires the establishment of new mechanisms whereby the extra risks to the vulnerable caused by climate change are spread more widely.¹⁰

The technical paper noted that in addition to humanitarian motives, there are strong socio-economic reasons for developed countries to participate in new insurance mechanisms: if not intercepted, climate impacts could lead to a downward socio-economic and humanitarian spiral, which could result in social collapse in vulnerable countries which could spread to other areas through economic and societal interdependence and migration, ending in even higher costs, including economic, social and humanitarian costs, for developed countries.¹¹ This could be partially avoided through the use of targeted ex ante risk-transfer mechanisms.¹²

⁷ FCCC/TP/2008/4, para. 4

⁸ FCCC/TP/2008/9, para. 90. See also para 10: "Climate change is likely to affect a range of assets. Assets do not have to be financial; they can be of any kind, such as agricultural harvests, livestock, infrastructure or intangible assets such as public services and human life itself. The likely hazards as a result of climate change and its effects on assets are considerable, although not known precisely. Some risks are long-term and inevitable, such as sea level rise, and for many the risks are difficult to quantify, such as the effect on ecosystems, livelihoods and cultural capital. Costs could be significantly reduced by risk reduction measures, resilience building and climate change adaptation, but this would still leave a residual risk, which would have a particularly harsh impact on the poor."

⁹ FCCC/TP/2008/9, para. 91.

¹⁰ FCCC/TP/2008/9, para. 91.

¹¹ FCCC/TP/2008/9, para. 92.

¹² FCCC/TP/2008/9, para. 92.

Insurance products now available in developed countries and being piloted elsewhere could provide valuable risk-pooling services on a large scale for vulnerable developing countries against hazards due to climate change that are short-term and acute, and where there is a spatial and temporal uncertainty of impact, as with droughts and hurricanes.¹³ It has proved difficult to scale up these products.¹⁴ But even with the successful development and deployment of existing and new risk-transfer mechanisms, the vulnerable would still be at risk from climate hazards. It would therefore be cost-effective as well as equitable for the international community to contribute to managing these risks.¹⁵

TP/2008/9 also explored non-insurance mechanisms, which include informal risk sharing; inter-temporal risk spreading; and collective loss sharing (solidarity). It noted that these approaches can in some case be cost-effective compared to insurance, and can: (a) provide direct financing for adaptation measures that reduce chronic climate impacts, such as responding to salt water intrusion, as well as measures that address sudden-onset events, such as building dykes or levees; (b) serve communities that do not have insurance institutions in place, or an insurance culture; (c) in some contexts offer a lower-cost alternative to insurance for providing post-disaster capital, especially for low-level risks; (d) redistribute climate-impact burdens from the poor with national and international solidarity.¹⁶

The paper went on to consider the possible design of a mechanism combining a number of possible tools and approaches, "Scheme C", which would coordinate international support to create a global solution for local problems in LDCs, SIDS and countries in Africa, where the underlying risks may be uninsurable, due to the high degree of hazard or the inability of the parties at risk to pay an adequate premium. It also considered the possibility of an all-risk parametric cover as a possible approach to slow onset hazards.

In final remarks, the paper noted that "Both insurance and non-insurance financial mechanisms potentially have a major role to play in an expanded and strengthened adaptation response to climate change risks. . . Adaptive capacity is being further undermined by climate change impacts and exposure of vulnerable countries and communities is increased. This means that LDCs, SIDS, countries in Africa and other vulnerable countries risk [sic] are becoming caught in a downward spiral of increasing climate change risks and diminishing capacity to manage them."¹⁷

These and other technical papers and discussions inside and outside the Convention process have only served to highlight the need for a comprehensive mechanism to address loss and damage the needs of the most vulnerable.

¹³ FCCC/TP/2009/9, paras. 11, 157, 460.

¹⁴ FCCC/TP/2008/9, para. 11.

¹⁵ FCCC/TP/2008/9, paras. 11, 13.

¹⁶ FCCC/TP/2008/9, para. 32.

¹⁷ FCCC/TP/2008/9, para. 33.

4. Current and emerging science underscores this need

In small island developing states, many islands are a maximum of a few meters above sea level, and most of the population of island States lives by the coast. These characteristics limit the capacity of SIDS to adapt to the adverse effects of climate change. In addition to sea level rise, SIDS are also experiencing an increase in the intensity and frequency of various extreme events, such as heavy rainfall, drought, high air and ocean temperatures, strong winds and storm surges.

Scientific observations since the publication of the Intergovernmental Panel on Climate Change (IPCC)'s Fourth Assessment Report (AR4) show that sea level is rising faster than predicted¹⁸ with an increasing proportion of the rise coming from melting ice sheets.¹⁹ Glacier losses have continued,²⁰ and losses from both the Greenland and Antarctic ice sheets have accelerated. Projections show a possible ice sheet loss of 56 centimetres by 2100.²¹ State-of-the-art projections of the sea level rise for the next century indicate that there is a substantial risk of sea level rise of 1 meter or more by 2100, with much higher levels of sea level rise in following centuries unless warming is limited to below 1.5°C.²² It is now quite clear that small island developing states need to be planning for at least 1 meter sea level rise by 2100, far above the IPCC Fourth Assessment Report range. The annual rate of global sea level rise has doubled in the past 2 decades,²³ but regionally, sea level rise can be substantially larger, as seen for instance in the tropical Western Pacific, with a rate three times larger than the global mean.²⁴

There is a growing risk of widespread, severe drought affecting many regions globally, including many small island developing states, even for a warming of around 2°C above preindustrial levels.²⁵ Recent drought trends are consistent with climate model projections.

¹⁸ Meyssignac, B., and A. Cazenave, *Sea level: A review of present-day and recent-past changes and variability*, Journal of Geodynamics 58 (2012): 96-109.

¹⁹ Cazenave, A., et al., *Sea level budget over 2003–2008: A reevaluation from GRACE space gravimetry, satellite altimetry and Argo*, Glob. Planet. Change (2008).

 ²⁰ Jacob, T., et al., *Recent contributions of glaciers and ice caps to sea level rise*, Nature 482 (2012): 514–518.
²¹ Velicogna, I., *Increasing rates of ice mass loss from the Greenland and Antarctic ice sheets*

²¹ Velicogna, I., *Increasing rates of ice mass loss from the Greenland and Antarctic ice sheets revealed by GRACE*, Geophysical Research Letters, 36 (2009) and Rignot, E. et al., *Acceleration of the contribution of the Greenland and Antarctic ice sheets to sea level rise*, Geophysical Research Letters, 38 (2011).

²² Schaeffer, M., W. Hare, S. Rahmstorf and M. Vermeer, *Long-term sea-level rise implied by 1.5* °C and 2 °C warming levels. Nature Clim. Change advance online publication (2012).

²³ Meyssignac, B. and A. Cazenave, *Sea level: A review of present-day and recent-past changes and variability.*" Journal of Geodynamics 58(0): 96-109 (2012).

²⁴ Becker , M., B. Messignac, C. Letetrel, W. Llovel, A. Cazenave and T. Delacroix, *Sea level variations at tropical Pacific islands since 1950*, Global and Planetary Change(80-81):85-95 (2012), available at http://www.legos.obs-

mip.fr/~delcroix/PDF_PUBLICATIONS/Becker_etal_GPC12.pdf

²⁵ Dai, A. *Increasing drought under global warming in observations and models*. <u>Nature Clim.</u> <u>Change</u> advance online publication, doi:10.1038/nclimate1633 (2012).

The frequency of the most damaging tropical cyclone is projected to double by the end of the 21st century.²⁶ New research shows mortality risk depends on tropical cyclone intensity, exposure, levels of poverty and governance. Despite projected reduction in frequency of tropical cyclones, projected increases in both demographic pressure and tropical cyclone intensity over the next 20 years expected to greatly increase the number of people exposed per year and exacerbate disaster risk, despite potential progression in development and governance.²⁷ Risks such as these well in an extremely adverse late on small island developing states many of which occur within tropical cyclone risk regions.

A further risk is that of extremely high temperatures, causing increasing health problems and trouble for agricultural activities. Extreme high temperatures are projected even for low levels of warming and are already being experienced in many parts of the world. For example, hot extreme temperature conditions, which covered much less than 1% of the Earth's surface between 1951-1980, now typically cover about 10% of the land area.²⁸

The most recent science is demonstrating profound risks to coral reef ecosystems even at 1.5° C warming above preindustrial due to the combined effect of sea surface temperature increase and ocean acidification.²⁹ A recent review shows that the anthropogenic rate of carbon input into the oceans appears to be greater than during any of the ocean acidification events identified so far over the geological past, dating back millions of years and including mass-extinction events.³⁰ Large scale loss and damage to coral reefs will cause serious harm to the livelihoods of many small island developing states through loss of food resources, degradation of tourism assets and related problems.

There are many signs of rapid climate change occurring faster than expected. Apart from sea level rise, the recent record loss of Arctic summer sea ice is an indication of this. New projections now show that a sea ice free summer may come within the next thirty years, instead of at the end of the century as predicted in the AR4.³¹ The threshold for the Greenland ice sheet to irreversibly melt down is now estimated to be 1.6°C above preindustrial levels, compared to the IPCC AR4 estimate of 3.1°C.³²

²⁶ Bender, M. A., T. R. Knutson, R. E. Tuleya, J. J. Sirutis, G. A. Vecchi, S. T. Garner and I. M. Held. Modeled Impact of Anthropogenic Warming on the Frequency of Intense Atlantic Hurricanes. Science 327(5964): 454-458 (2010).

²⁷ Peduzzi, P., B. Chatenoux, et al., *Global trends in tropical cyclone risk*. Nature Climate Change 2(4): 289-294 (2012). ²⁸ Reported by NASA scientist in: Hansen, J., Sato, M. & Ruedy, R. *Perception of climate change.*

Proceedings of the National Academy of Sciences, doi:10.1073/pnas.1205276109 (2012). ²⁹ Frieler, K., M. Meinshausen, A. Golly, M. Mengel, K. Lebek, S. D. Donner and O. Hoegh-Guldberg, Limiting global warming to 2°C is unlikely to save most coral reefs. Nature Clim. Change advance online publication (2012). ³⁰ Zeebe, R. E. *History of Seawater Carbonate Chemistry, Atmospheric CO2, and Ocean*

Acidification. Annual Review of Earth and Planetary Sciences 40(1): 141-165 (2012). ³¹ See Wang, M. and J. E. Overland, *A sea ice free summer Arctic within 30 years?*, Geophys.

Res. Lett. 36 (2009); Zhang, X., Sensitivity of arctic summer sea ice coverage to global warming forcing: towards reducing uncertainty in arctic climate change projections, Tellus A 62(3): 220-227 (2010); Maslowski, W., J. Clement Kinney, M. Higgins and A. Roberts, The Future of Arctic Sea Ice. Annual Review of Earth and Planetary Sciences 40(1): 625-654 (2012).

³² Robinson, A., R. Calov and A. Ganopolski, *Multistability and critical thresholds of the* Greenland ice sheet. Nature Climate Change 2 (6): 429-432 (2012).

The IPCC's Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) makes clear the human contribution to climate extremes and states the very likely contribution of mean sea level rise to increased extreme coastal high water levels, coupled with the likely increase in tropical cyclone maximum wind speed, noting that this is a specific issue for tropical small island states.³³

The best available science confirms that loss and damage to small island developing states (SIDS) from the adverse effects of climate change is inevitable and that a portion of this loss and damage is the direct result of anthropogenic climate change.

5. Conclusion

Loss and damage to small island developing states from the adverse effects of humaninduced climate change is now inevitable. A portion of this loss and damage is the direct result of anthropogenic climate change caused by greenhouse gas emissions.

It is the proper role of the Convention to minimise and address unavoidable loss and damage from the impacts of anthropogenic climate change. Accordingly, the time has come for the establishment of an international mechanism to address loss and damage from the adverse effects of climate change. Anything less than the establishment of such a mechanism in Doha will represent a failure of the international community to respond to what are now well-recognized needs of SIDS, LDCs and other particularly vulnerable developing countries.

AOSIS plans to bring forward recommended decision text following the SIDS expert meeting scheduled to be held in Barbados from 9 – 11 October 2012.

³³ IPCC, SREX, *Summary for Policymakers*, available at http://www.ipcc-wg2.gov/SREX/images/uploads/SREX-SPMbrochure_FINAL.pdf.