



Integrated Research on Disaster Risk (IRDR) A programme of ICSU/ISSC/UNISDR

Meeting with the Science Council of Japan
Tokyo, 9 November 2012

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www.irdrinternational.org



Science Plan

An *integrated approach* to research on disaster risk (trans-disciplinary, collaborative research programme)

- 1.Characterization of hazard, vulnerability and risk
- 2.Effective decision-making in complex and changing risk context
- 3.Reducing risk and curbing losses through knowledge-based actions



IRDR Science Plan at:

<http://www.irdrinternational.org/>

Data needed for managing and reducing the risk of disasters

Three main types of data:

- Data on **disaster losses**
- Data on **natural events or phenomena**
- Data on **vulnerability** (human, social, physical, institutional, economic, ecological)

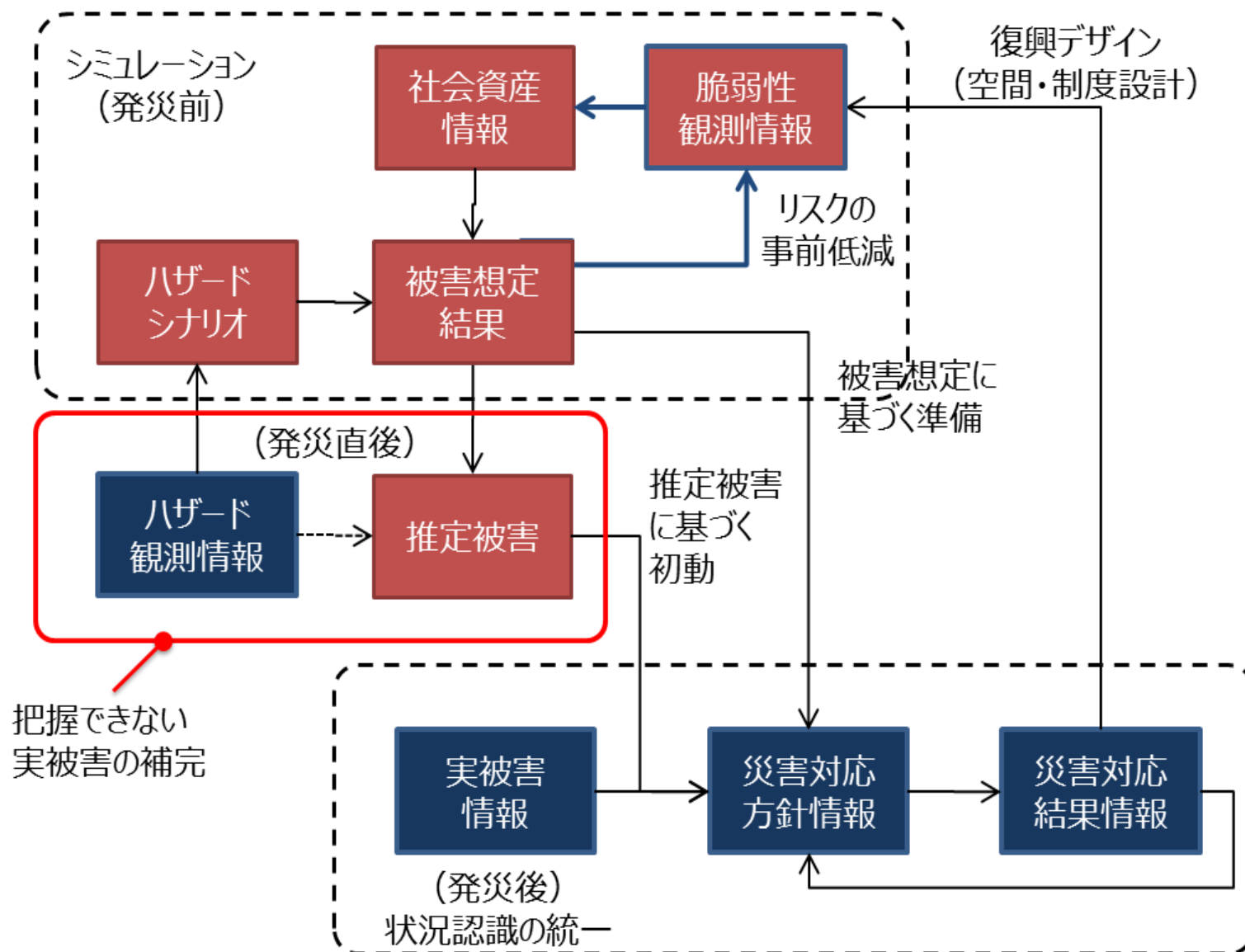


Today's Discussion Points

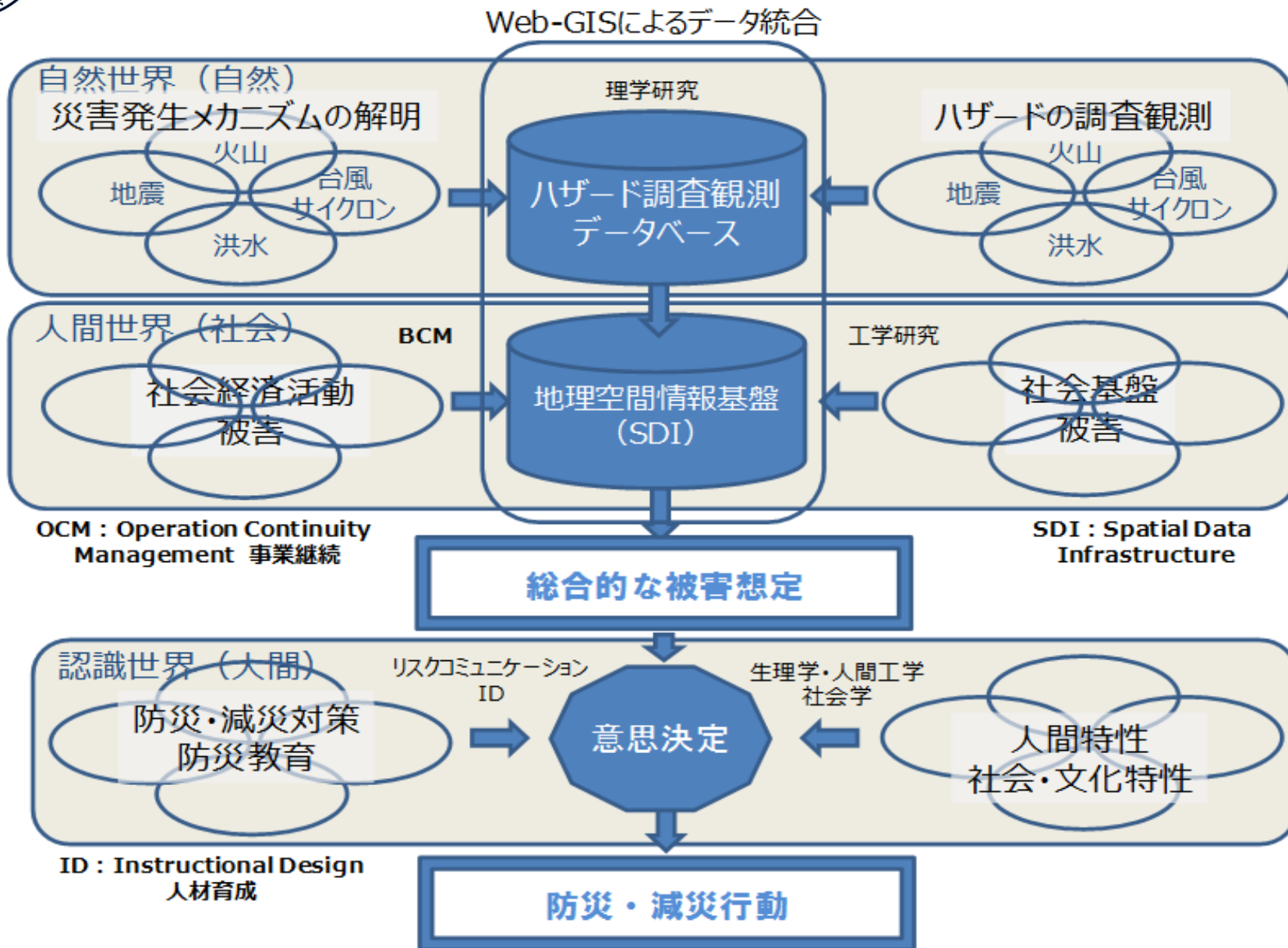
To promote IRDR:

1. What kind of cooperative frameworks do we need to establish in Japan?
→ well coordinated inter-discipline and -sector cooperation
2. How to share experiences and achievements of Japan among different disciplines, sectors and countries?
→ sharing data and information, exchanging ideas, knowledge and experiences, and working together through specific target in depth
3. What kind of actions should be taken?
→ domestic coordination for establishing an institutional framework and developing an integrated research plan, and international coordination for research and policy by identifying short and long term targets

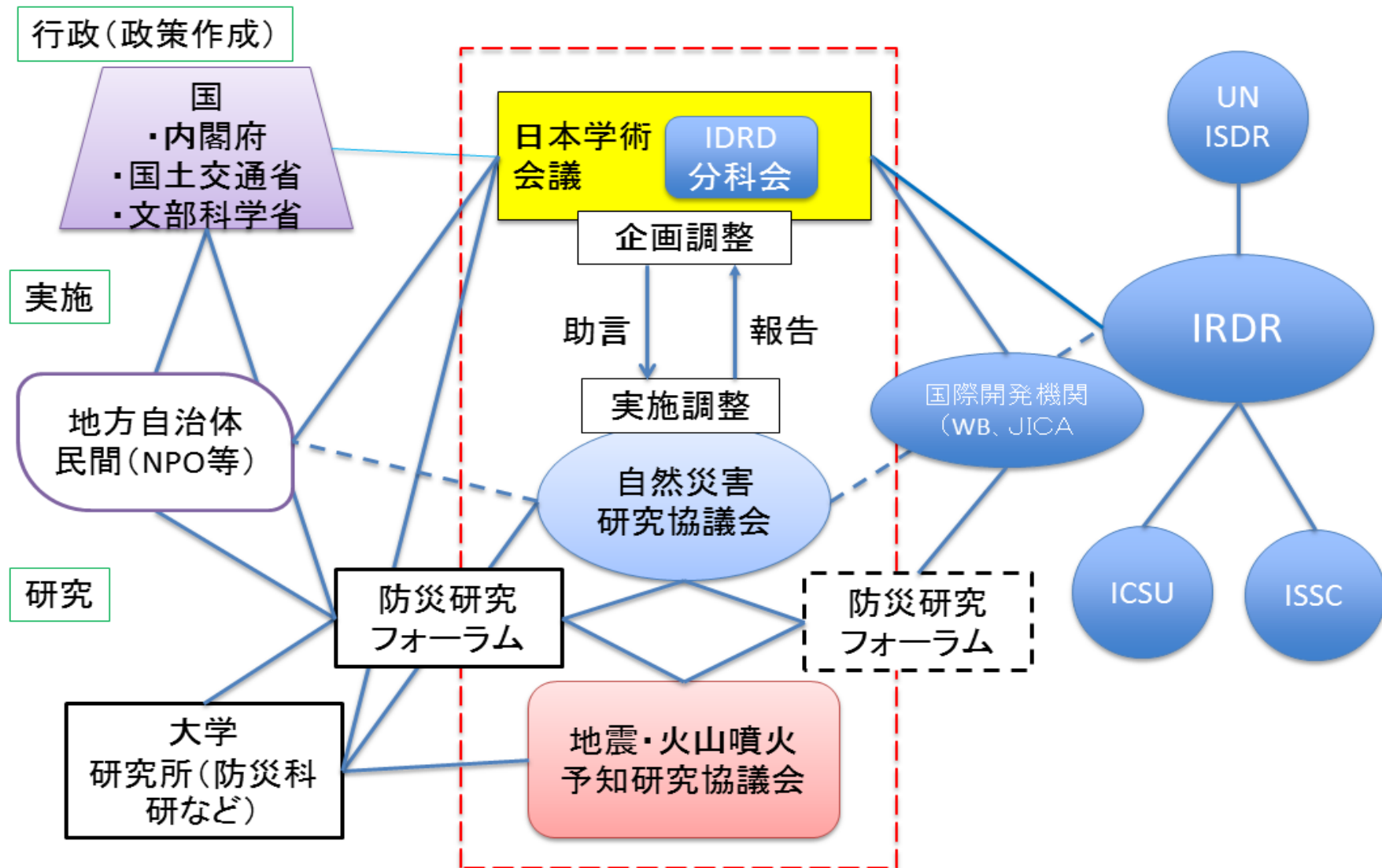
効果的な防災・減災を実現するための情報フローと活動



災害リスクに関わる自然・社会・人間の関連性



研究の推進体制





United Nations

A/CONF.216/L.1



RIO+20
United Nations Conference
on Sustainable Development

Distr.: Limited
19 June 2012

Original: English

Rio de Janeiro, Brazil
20-22 June 2012

Agenda item 10

Outcome of the Conference

The future we want

274. We recognize the importance of space-technology-based data, in situ monitoring and reliable geospatial information for sustainable development policymaking, programming and project operations. In this context, we note the relevance of global mapping and recognize the efforts in developing global environmental observing systems, including by the Eye on Earth Network and through the Global Earth Observation System of Systems. We recognize the need to support developing countries in their efforts to collect environmental data.

Recommendation 2: Considering the demonstrated success of the incubation model (which brings together existing observation systems dedicated to a specific issue and sets up the conditions to ensure that global and regional observation datasets become available and easily), the Post-2015 WG recommends Plenary endorse strategic direction option 2.1.C for the period 2015-2025.

- A GEO will function as a **catalyst** for Earth observations, including network strengthening, strategic planning, serving as a coordination and facilitation mechanism for Earth observations, and will identify needs for applications and services. The financial model for GEO would remain unchanged;
- B In addition to option 2.1.A above, GEO will commit appropriate resources to implement and sustain a more **robust and expanded GEOSS information system**, facilitating enhanced access to Earth observations data and information. A strengthened financial model for GEO would need to be elaborated prior to 2015 to support this option;
- C In addition to option 2.1.B above, GEO will **incubate specific applications and services** based on Earth observations, and arrange for these to be adopted, supported, and managed by specific governments and organizations. GEO will maintain appropriate links with these initiatives, enabling ongoing collaboration. A moderately strengthened financial model for GEO would need to be elaborated prior to 2015 to support this option;
- D In addition to option 2.1.C above, GEO will develop and deliver, on a continuing basis, a sequence of **operational applications and services** in support of international priorities. An entirely new financial model for GEO would need to be elaborated prior to 2015 to support this option.

Recommendation 3: Given the historical background that gave rise to GEO and links with sustainable development issues since its inception (Section 1.1 above), the Post-2015 WG recommends Plenary endorse SBA structure option 2.2.B for the period 2015-2025.

- A Retain the overall current SBA structure (status quo);
- B Maintain the current basic SBA structure while allowing for modifications, and explore linkages to sustainable development framework themes:
 - Sustainable Economies (economic development);
 - Resilient Society (social development);
 - Vibrant Planet (environmental protection).
- C Restructure the work of GEO around sustainable development framework themes, building on the successes of the current SBA structure.

Recommendation 4: In the interest of preserving GEO as a flexible, agile and inclusive international partnership, the Post-2015 WG recommends Plenary endorse governance option 2.3.B for the period 2015-2025.

- A The current GEO governance structure will be maintained (voluntary, non-juridical, and flexible);
- B The current GEO governance structure will be maintained (voluntary, non-juridical and flexible); additionally, linkages with other relevant Earth-observation organizations, including the private sector, should be improved and resources to sustain key components of GEOSS should be identified;
- C GEO will be constituted as a totally new, formal intergovernmental program or organization, with mandatory financial contributions and a more formalized governance structure.

データ統合・解析システム (DIAS)

概要: 多種多様な観測データを収集し、品質管理・フォーマット変換を行うとともに、大容量データの検索、可視化、時間的・空間的な相関関係の解析など高度な情報処理を集中的に行うことによって社会的、科学的に有用な情報に変換して提供するシステムの実現を図る。

実施主体: 東京大学・宇宙航空研究開発機構・海洋研究開発機構
実施期間: 5年間(平成18~22年度)



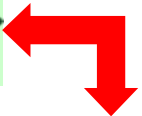
- システム開発
- プロトタイピング
- 運用設計



分野適用研究



グリーン・ネットワーク・オブ・エクセレンス
環境情報分野



地球環境情報統融合プログラム (DIAS-P)

概要: DIASを**高度化・拡張**するとともに、多様な分野のステークホルダーが、超大容量で多様なデータ・情報を協働して統融合し、新たな価値を創出できるデータ基盤(これを、**ワークベンチ**とよぶ)の**プロトタイプ**を構築する。その上で、地球規模課題解決に向けて、科学的先端性を持続的に発揮し、実利用によって公共的利益を実現できる**運用体制**を設計・提案する。

実施主体: 東京大学、海洋研究開発機構、宇宙航空研究開発機構
国立環境研究所
実施期間: 5年間(平成23~27年度)

