

Area Business Continuity Management

Scalable Cross Sector Coordination Framework of
Disaster Management for Business Continuity

Japan International Cooperation Agency



Why the “Area BCM” initiative?

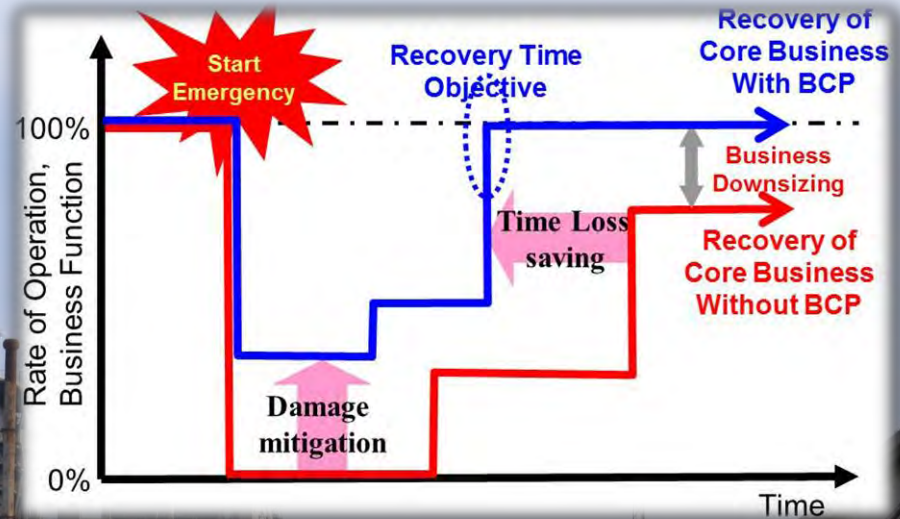
Intensifying Disaster
Increasing economic loss
Globalizing Impacts
Importance of Local Economy
Private sector's role highlighted



Why the “Area BCM” initiative?

BCMS is standardized as ISO22301 and disseminated in many business enterprises around the world.

In Great East Japan Earthquake, however, the efficacy of prearranged Business Continuity Plans (BCP) in private enterprises becomes insufficient due to disruption of common resources such as energy, water, transportation and communications.



Lessons from catastrophes
Limited function of single BCM
New concept is required

Why the “Area BCM” initiative?

Lack of critical resources in affected area

	Human	Substance	Finance	Information
Internal Resources	Managers, Workers, Employees,	Buildings and facilities, Equipment, Parts and raw materials, fuels, Value chains, etc.	Money and Assets, Account system, Contract, Insurance, etc.	Computer systems, Operation data, Business documents, Archives, etc.
External Resources	Public officers, Public workers	Energy (Electricity, Gas, etc.), Water (Supply, Sanitary and sewerage), Transportation (Road & Rail, Port & Airport, etc.), Food and medical supplies, Logistic services, Accommodation, etc.	Capital, Transaction system, Stock market	Internet, Tel and Fax, Communication system

Difficult decision making on how effectively restore and allocate those scarce resources to various entities of the affected local society

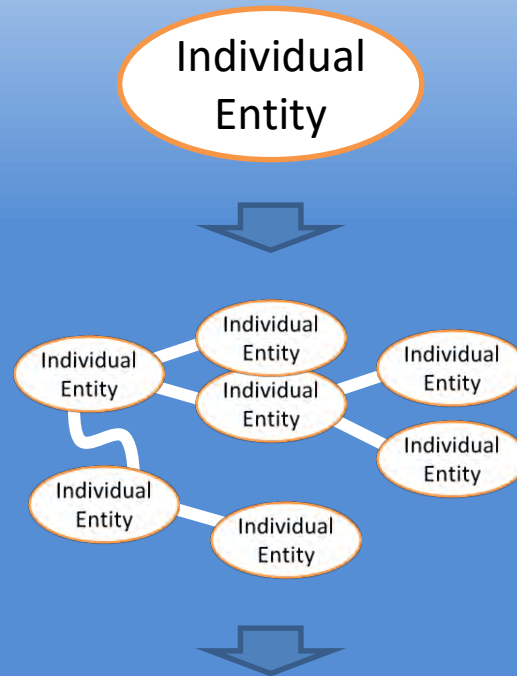
Why the “Area BCM” initiative?

Private sector's view points necessary for area wide scale of disaster

- Each enterprise is one of the members of the **local community**
- Companies are affected by disaster along with the community **in a region**
- It is expected to take a role as noble **Cooperate Citizenship** that is beyond the concept of CSR (Cooperate Social Responsibility)
- Business continuity of local enterprises **can sustain** the long term reconstruction and development of the locality
- Each enterprise benefits from **social infrastructures** (essential resources such as enery, transportation, services) and **environment** (water, air, land, nature)
- Key action that should be taken in the normal state is to **share the information** about BCPs which have different interests

Why the “Area BCM” initiative?

It was expected to have a common protocol to enhance the resilience of the local community that corresponds to the interdependency in this networking world



Individual Resilience by each BCM

- Company, Group of companies
- National and local governments
- Public organization
- NPO, NGO

Cooperated Resilience by BCMs

- Supply chains
- Government administrations
- Industry associations
- Economic organizations

Cooperate Citizenship

Public services

Government admins

Societal Resilience by Area BCM

- Local society
- Public Private Coordination
- Unified actions

What is “Area BCM”?

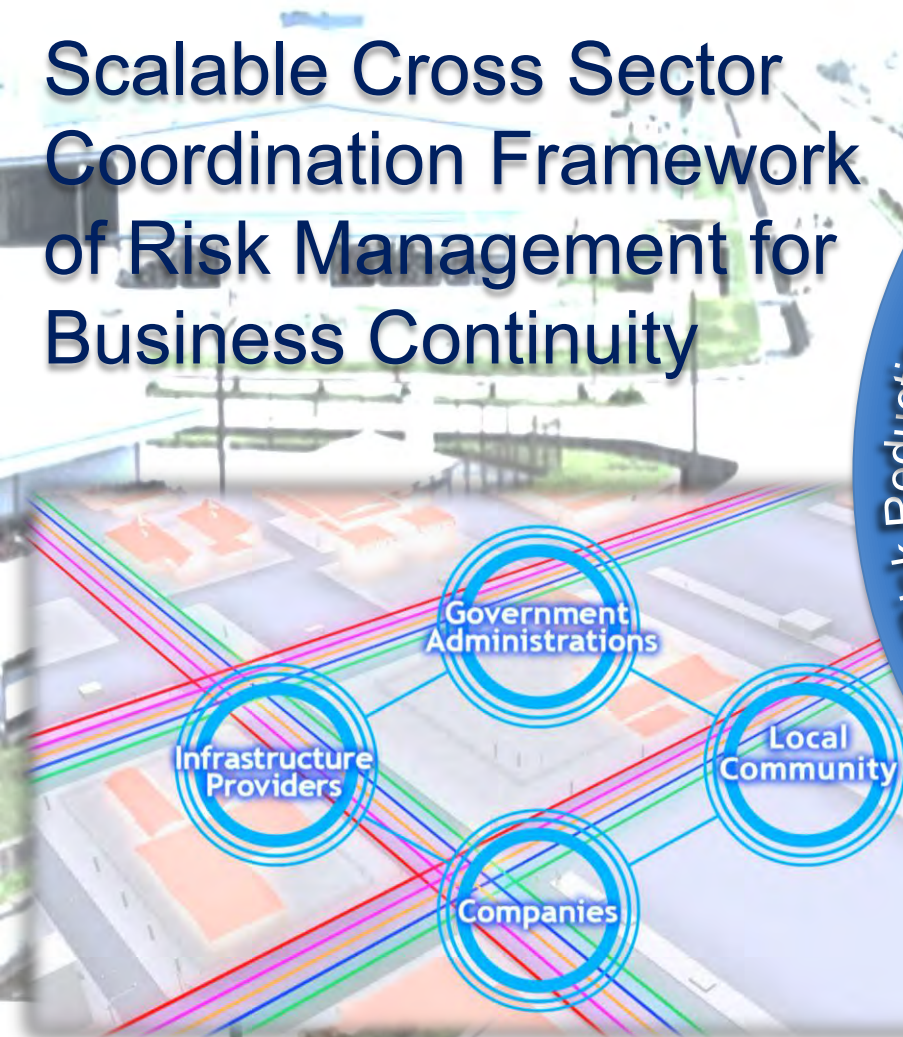
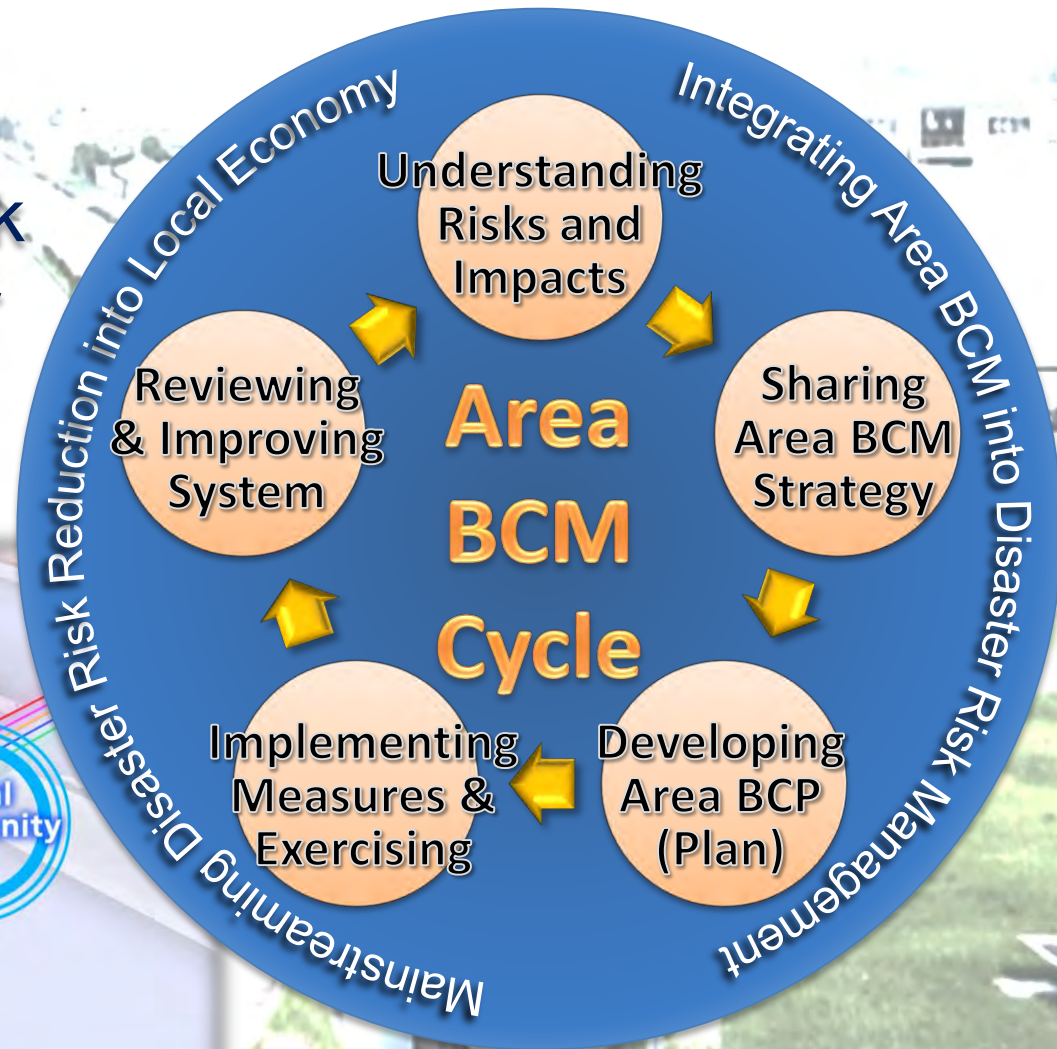
The area-wide Business Continuity Requires:

- Public Private Coordination
- Probabilistic Analysis of Risks and Impacts
- Management of Critical External Resources*
- Area-wide Scalability of Management

Centrally to Internal resources, such as company's buildings, facilities, parts and raw materials, the **External resources***, such as energy, water and transportation infrastructures, are managed normally by public sector and not controllable by private enterprises. The external resources are also distributed not only for business purposes but also for securing community life. Therefore, in case of emergency that imposes limited allocation of those resource, collaborative efforts are required between the private sector, public sector and the local community to maintain the critical external resources.

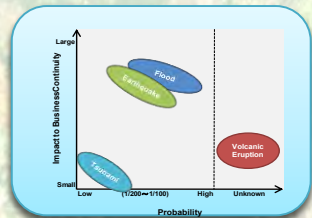
What is “Area BCM”?

Scalable Cross Sector
Coordination Framework
of Risk Management for
Business Continuity

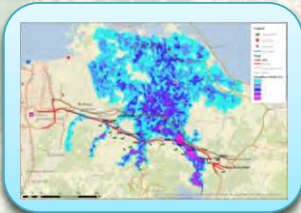


What is “Area BCM”?

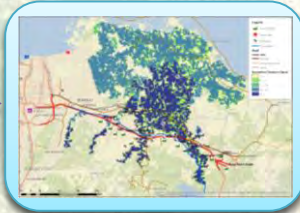
Risk and Impact Analysis



Identify Predominant Hazard



Hazard Simulation



Risk Assessment

Vulnerability of
Infrastructure,
utilities and the area

Current measures by
public sectors and
private enterprises



Disaster Scenario

Understanding
Risks and
Impacts

Reviewing
& Improving
Hazard Simulation

Sharing
Area BCM

Business
Impact
Analysis

Measures &
Exercising

(Plan)

What is “Area BCM”?

Stakeholder’s forum

- Sharing risk and impact information
- Strategy and direction of business continuity of the area
- Scope of Area BCM coordination among public and private sectors

Cooperate Citizenship

Public services

Government admins



What is “Area BCM”?

Formulating/developing the Area BCP



What is “Area BCM”?

Measures should be balanced in all stages of Disaster Management Cycle of:

- Prevention and Mitigation,
- Preparedness and Response, and
- Rehabilitation and Reconstruction.

Combined tactics:

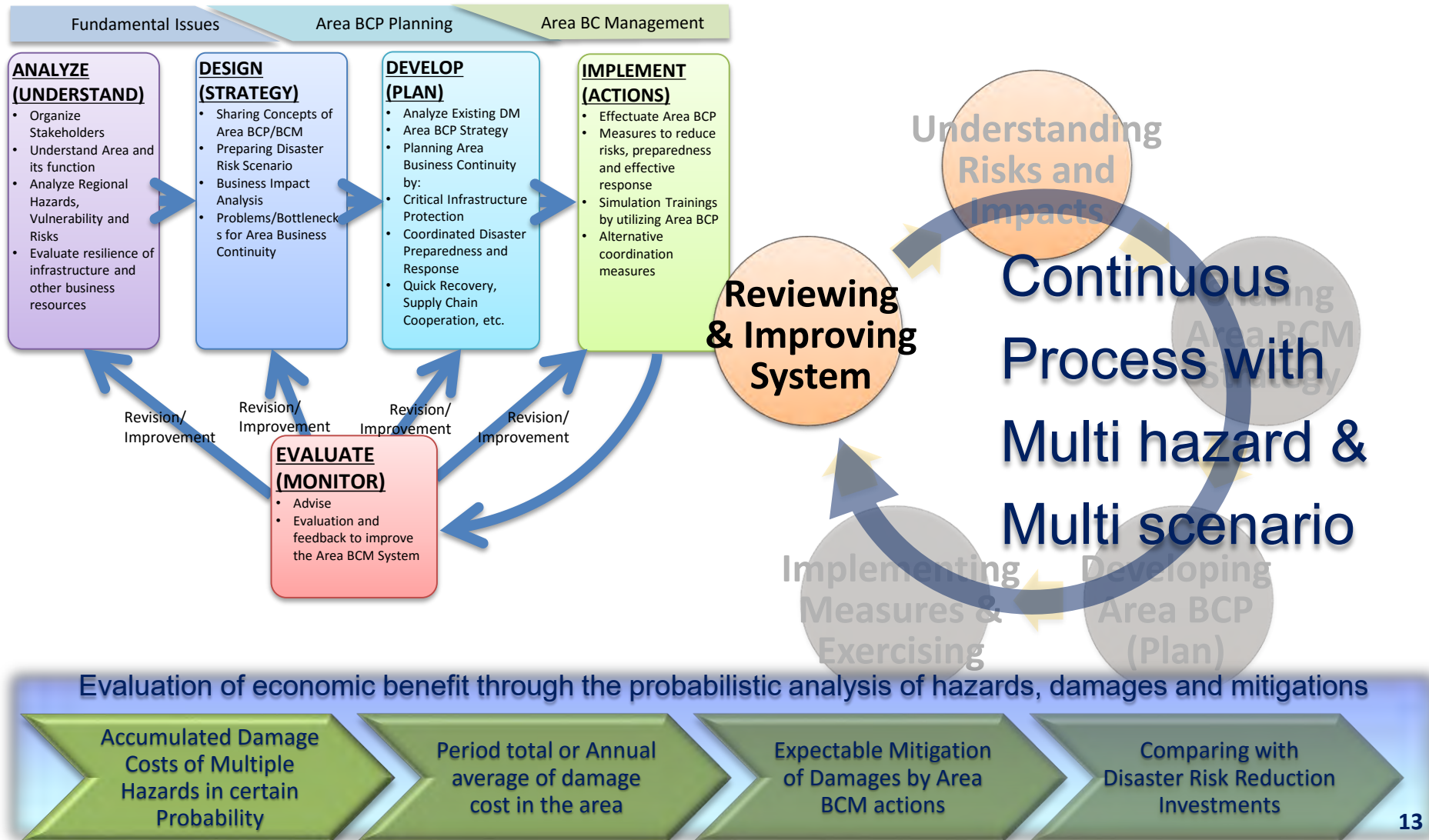
- Strengthening existing area-wide capacity of DRR,
- Preparing alternative measures, and
- Making temporary back-ups.

Multi-Scheme

- Cooperation with other stakeholders to share essential resources for business continuation,
- Making new investment for area-wide resilient development, and
- Transferring the risks by insurance or public compensation



What is “Area BCM”?

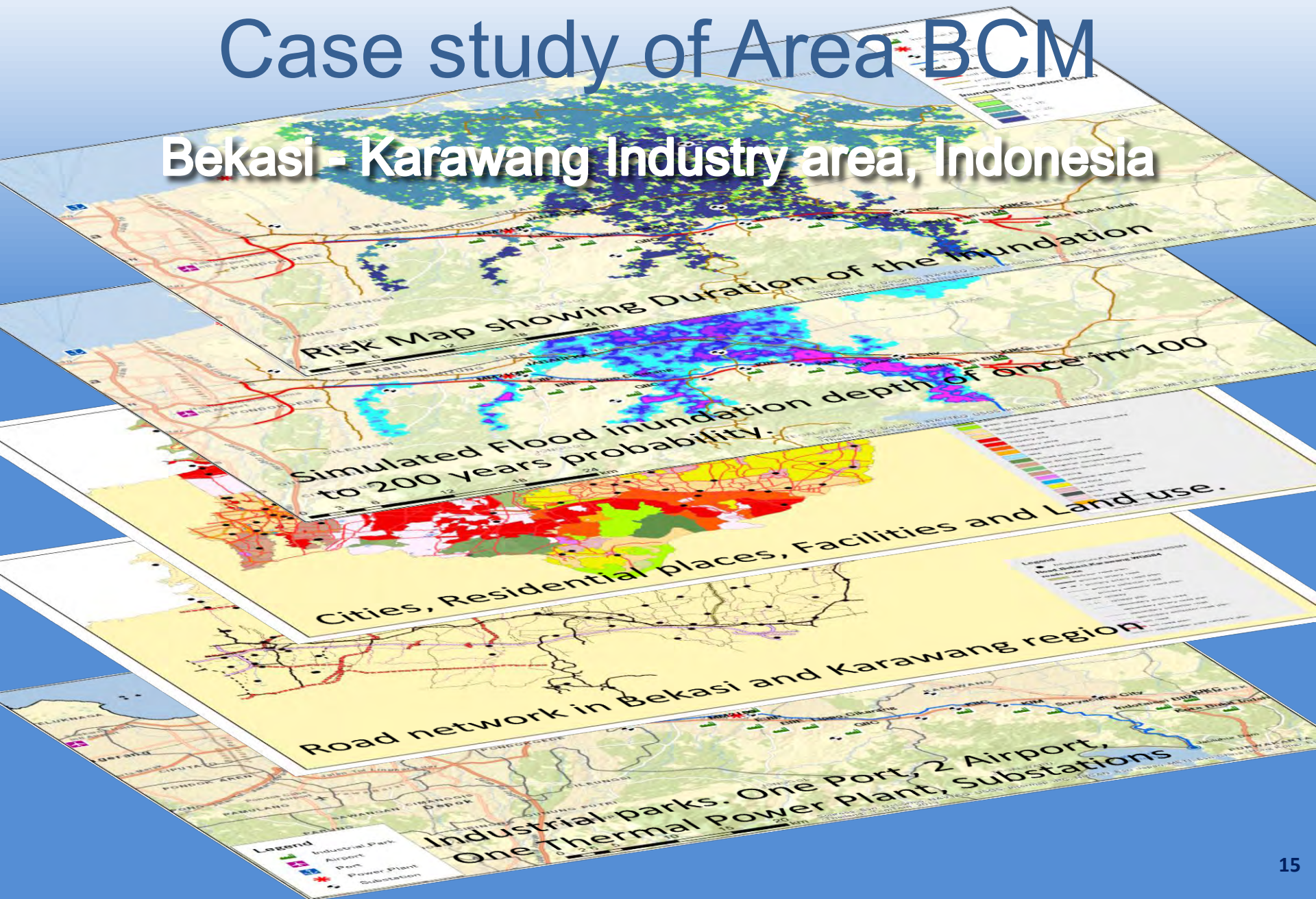


What are the Benefits of Area BCM?



Case study of Area BCM

Bekasi - Karawang Industry area, Indonesia



Case study of Area BCM

Scenario for BIA, Bekasi - Karawang Industry area, Indonesia

Buildings in industrial park

- Karawang City and surrounding area is inundated more than 2 weeks.
- Industrial parks however are not inundated, facilities are not damaged.

Electric power and Lifelines

- Two Substations in Karawang are inundated over 2m depth and stop the operation for two weeks.
- Some of base stations of telephone and mobile phone stop the operation because of the shortage of electric power.

Transportation infrastructure

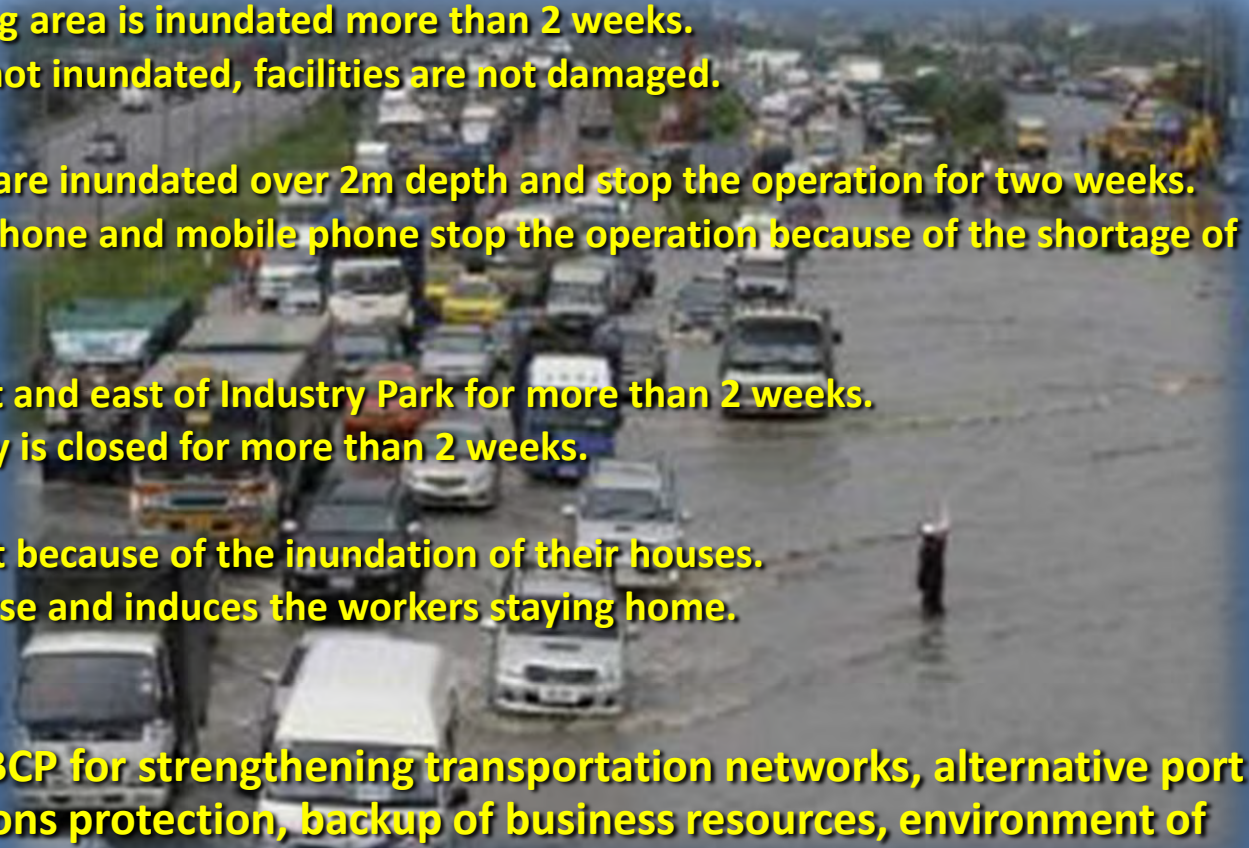
- Freeway is closed both in west and east of Industry Park for more than 2 weeks.
- Primary Road in Karawang City is closed for more than 2 weeks.

Workers of Industrial Parks

- Many employee will be absent because of the inundation of their houses.
- Traffic condition becomes worse and induces the workers staying home.



Stakeholders are formulating BCP for strengthening transportation networks, alternative port development, power sub stations protection, backup of business resources, environment of stranded workers, etc. The Area BCM System is established and expanding its scope.



How the Area BCM guide you?

Applied methodology in the pilot areas will be summarized to be disseminated for guiding any local economy to raise resilience to disasters.

JICA Study and Expert Panel of Japan and ASEAN

Area BCP Workshops in Pilot Areas

Seminars on Area BCM

Guide on
Area
Business
Continuity
Management



Good practices of Area BCM in Japan

- **Otemachi Marunouchi Yurakucho Area (Central Tokyo)**
 - Disaster risk management council is formulated in PPP
 - Stranded workers sheltering, emergency resource management, information sharing, coordinated exercise, ...
- **Kashima Industrial Complex**
 - Factory directors round-table
 - Enhanced communication, quick Information sharing, ...
- **Akemi Industrial Park (Aichi prefecture)**
 - Joint disaster management plan
 - Quick evacuation, effective coordination, joint exercise, ...
- **Industrial associations in areas of Kanagawa and Niigata (remote places)**
 - Alternate production consignment agreement to make effective business continuation

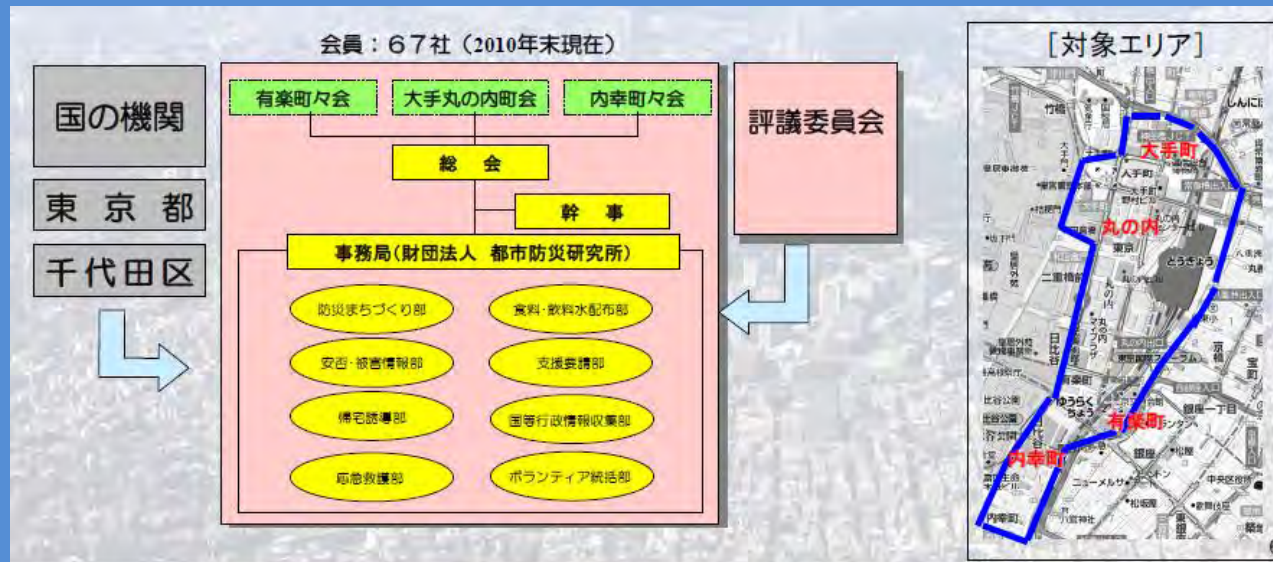
Otemachi Marunouchi Yurakucho Area (central Tokyo)



- Target area of 120 ha
- Over 290,000 workers in 4,000 companies
- 91 groups of business and land owners
- Symbolic business center of Japan since Meiji era

Otemachi Marunouchi Yurakucho Area Disaster risk management council

- The Council (Tokyo Station disaster risk management Tonarigumi) is established in 2004
- Consideration if disaster strikes, of long commute times, congestion and confusion for citizens to move
- Aiming to find ways to secure safety and peace of a locality around Tokyo Station as the typical urban city
- Thinking of how we realize it as a local town, gathered volunteers of the district within the company, brainstormed the knowledge, and do necessary activities



Otemachi Marunouchi Yurakucho Area

Examples of actions

- **Stranded workers shelter**

- Spaces, electricity, sanitary, mat and blanket, ...
- Information dissemination
- Experienced the GEJE when 1,500 people sheltered, now the capacity is more than 5,000
- Participatory exercise of sheltering every year
- Stockpiling foods and goods



- **Emergency power management**

- Generators to share electricity
- Multi source Fuel system
- Redundant electric supply network

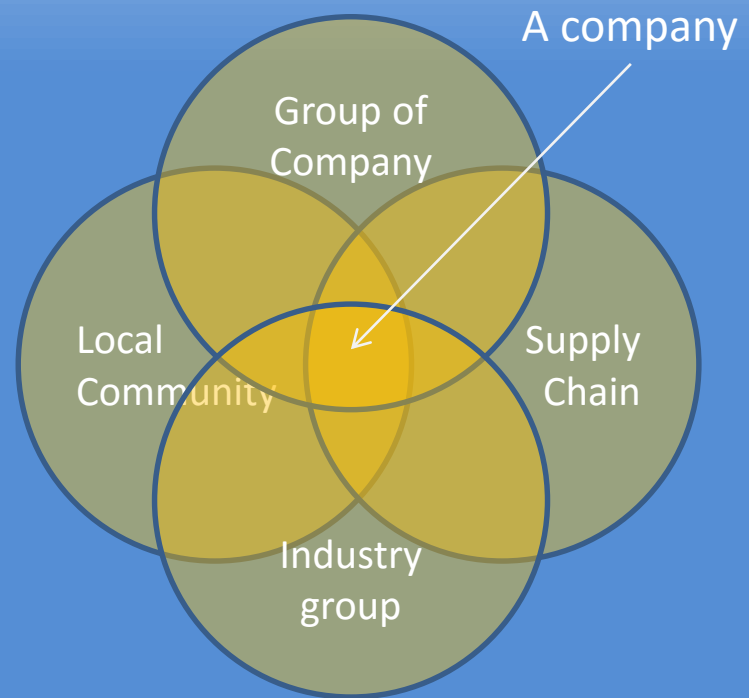
- **Water resource management**

- Emergency goods storage
- Water Recycling system
- Emergency wells and purifying filter



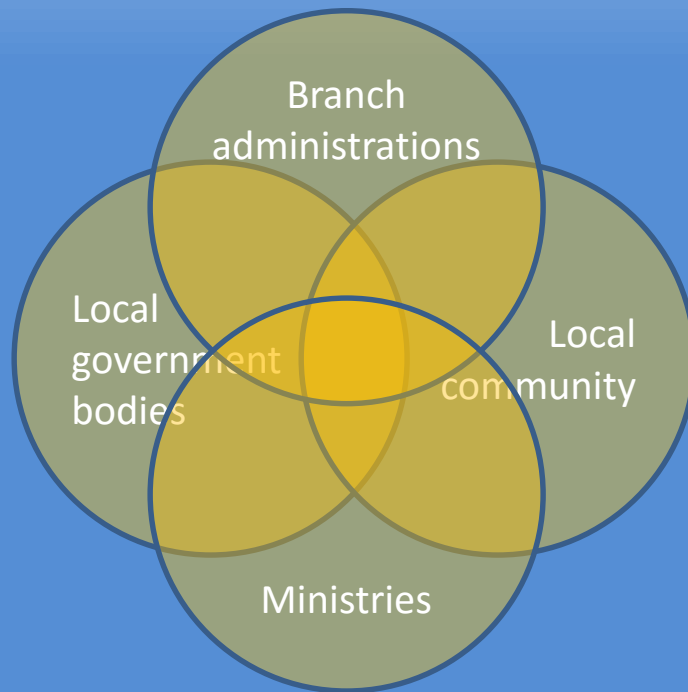
Standardization of Area BCM

Private sector seeks for more effective standard expanded from the target area (business community) of existng BCM



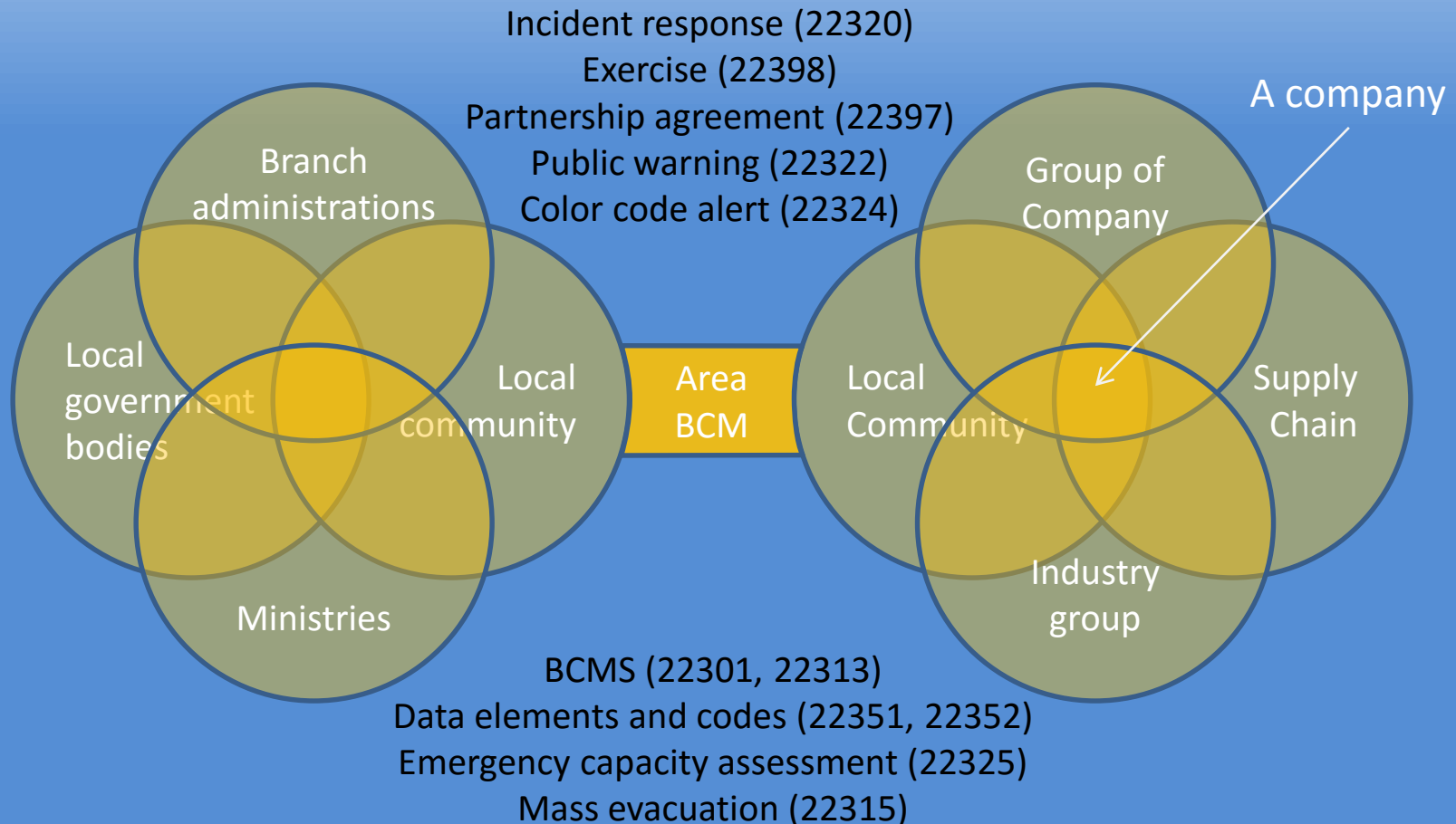
Standardization of Area BCM

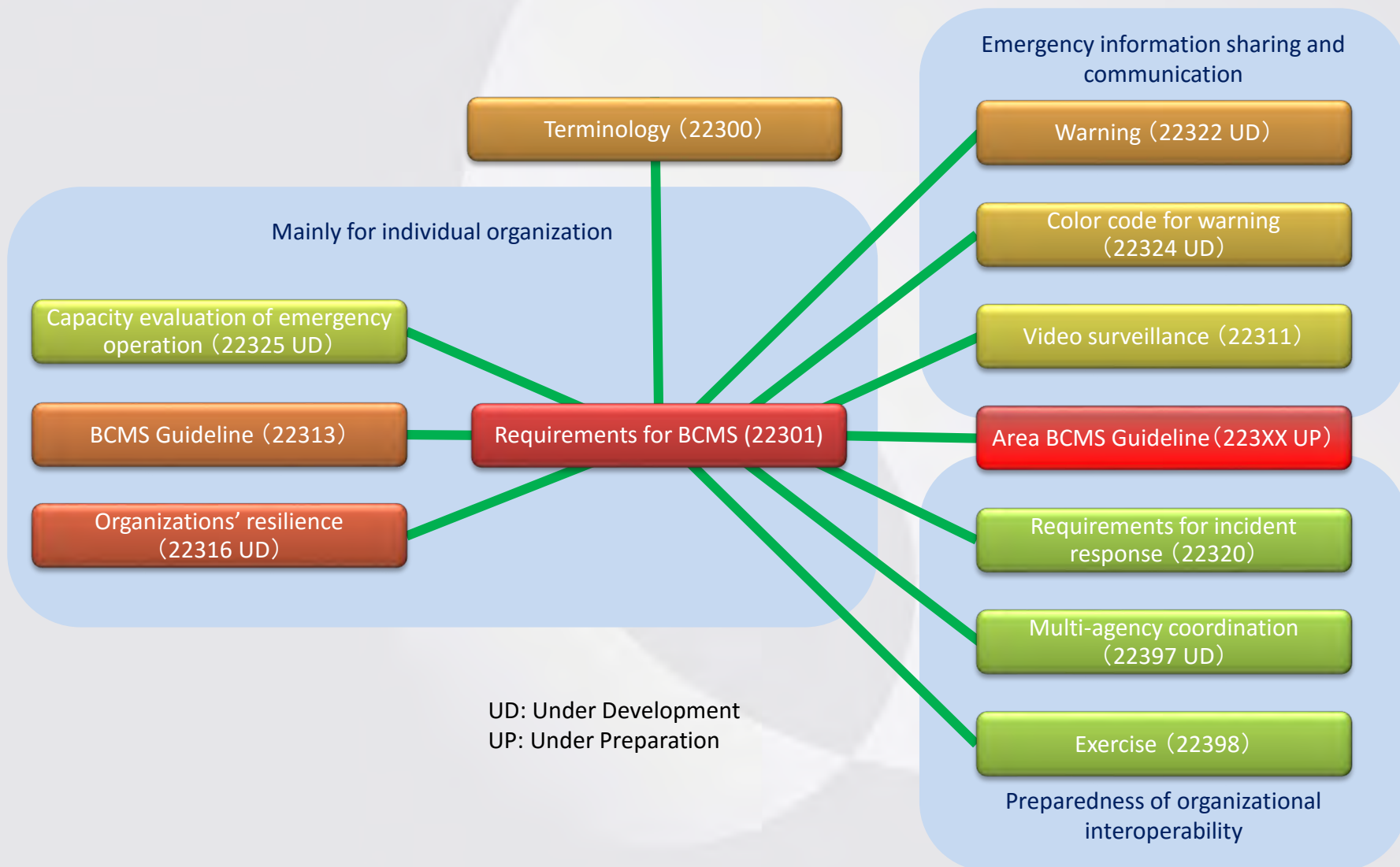
Public sector also seeks to establish standard protocol for effective disaster management (public services) coordinating various entities



Standardization of Area BCM

Public Private Coordination in Common BCM Standard





Epilogue

<Improved incentives, self regulation and accountability>

<Applicability of Area BCM>

<Uniqueness or difference from other incentives>

<Ownership of Area BCMS, as a challenge>

Thank you

Area Business Continuity Management



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www.jica.go.jp

企業間・自治体との連携を実施している先進事例

	サプライチェーンを構成する 企業間の連携	地域内連携	業界内連携
概要	<ul style="list-style-type: none"> ➢ IT 等を活用した自社・パートナー情報の可視化による資源配置とサプライチェーンの再設計 ➢ BCP/BCMの目標や優先して復旧すべき品目等を明確化、その内容について取引先と共有 ➢ 中小規模事業者への支援 	<ul style="list-style-type: none"> ➢ 企業間、自治体との連携を深めるため、地域協議会等を活用。地域内の人的ネットワークを形成 ➢ 地区全体での共同訓練の実施、共同の災害備蓄・自家発電設備等の整備 ➢ 企業間連携による委託代替生産協定の締結 ➢ 企業と自治体との連携協定の締結 	<ul style="list-style-type: none"> ➢ 業界内の企業間での<u>協力</u>、情報共有 ➢ 競争に直結しない部品等の<u>標準化</u>を検討 ➢ 業界としてのBCP/BCMに関する<u>ガイドライン等の策定</u> ➢ 業界としての<u>合同訓練</u>等の実施
先進事例	<ul style="list-style-type: none"> ➢ (ITメーカー) ITを活用し、サプライチェーン情報を可視化。<u>必須部品の需給管理</u>を徹底し、問題発生抑制と解決期間の半減を達成 ➢ (小売会社) 品目別に自社、サプライチェーンの在庫量を把握したうえで、増産可能量を推計、さらに自社の物流センター内に<u>燃料備蓄基地を設置</u> ➢ (物流会社) 大規模災害時に不通区間が生じた場合は、トラックや内航船による<u>代行輸送を実施</u> ➢ (自動車メーカー) 被災時に優先復旧・生産すべき<u>重点品目を明確化</u>。生産再開日数の目標を具体的に設定し、サプライヤーと共有、周知のためサプライヤー等と勉強会を実施 	<ul style="list-style-type: none"> ➢ 鹿島東部コンビナートでは、<u>工場長懇談会</u>等を通じ、平時よりコミュニケーション基盤を構築、信頼構築と情報共有の下、迅速に復旧 ➢ 大丸有地区では企業と行政等から構成される協議会を設置し、予め「地域防災計画」を策定。<u>自治体と連携して「帰宅困難者対策訓練」を実施</u> ➢ 愛知県の明海地区工業団地では<u>共同の「避難計画」を策定、「共同訓練」を実施</u> ➢ 神奈川県と新潟県の遠隔地の工業組合同士で、「委託代替生産協定」を締結 ➢ ある小売会社は、複数の自治体と、災害対策等を含め多分野に渡り、連携協定を締結 	<ul style="list-style-type: none"> ➢ 通信業界では、<u>無線LAN回線の共同利用</u>などの協力を検討 ➢ 石油業界では、関係官庁と調整し、<u>施設の共同利用</u>等の仕組みを構築 ➢ 飲料業界では、被災時に代替供給先からの調達が可能となるよう、<u>缶容器の規格を統一</u> ➢ 損害保険業界では、業界策定のマニュアルのもと、被災地域の被害状況を業界各社の共同により調査 ➢ 銀行業界では、業界団体加盟各社が関係官庁等とともに、合同訓練を実施

Where is the Area BCM going?

