

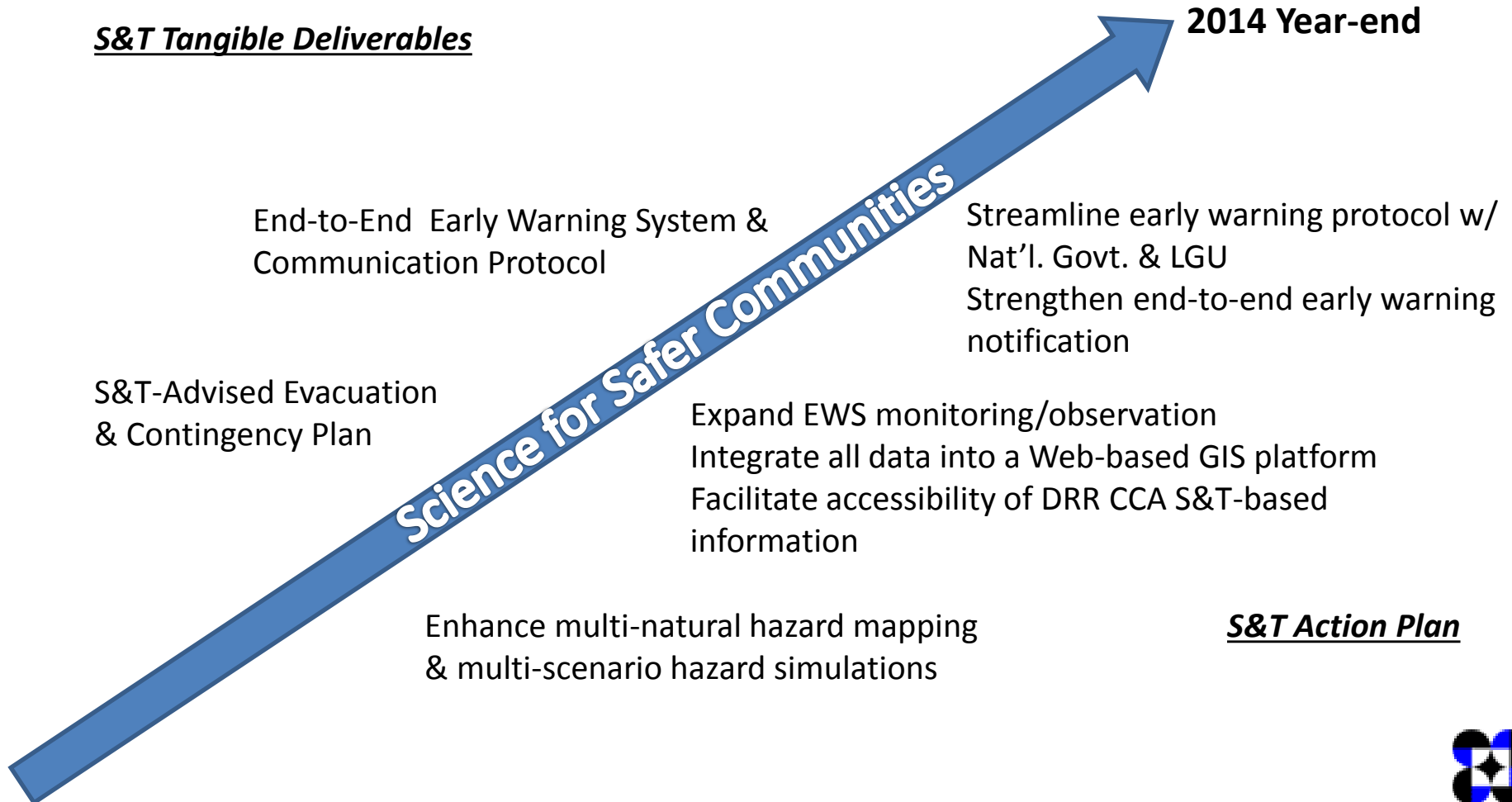
DRR/CCA S&T Roadmap : 2014 - 2016

Immediate DRR/CCA Preparedness Goal: 2014

- S&T Capacitated Safer Communities on Extreme Hazard Events for 81 Provinces/1634 Cities & Municipalities
- Multi-Hazard Early Warning Advisory-Communication Protocol System

S&T Tangible Deliverables

2014 Year-end

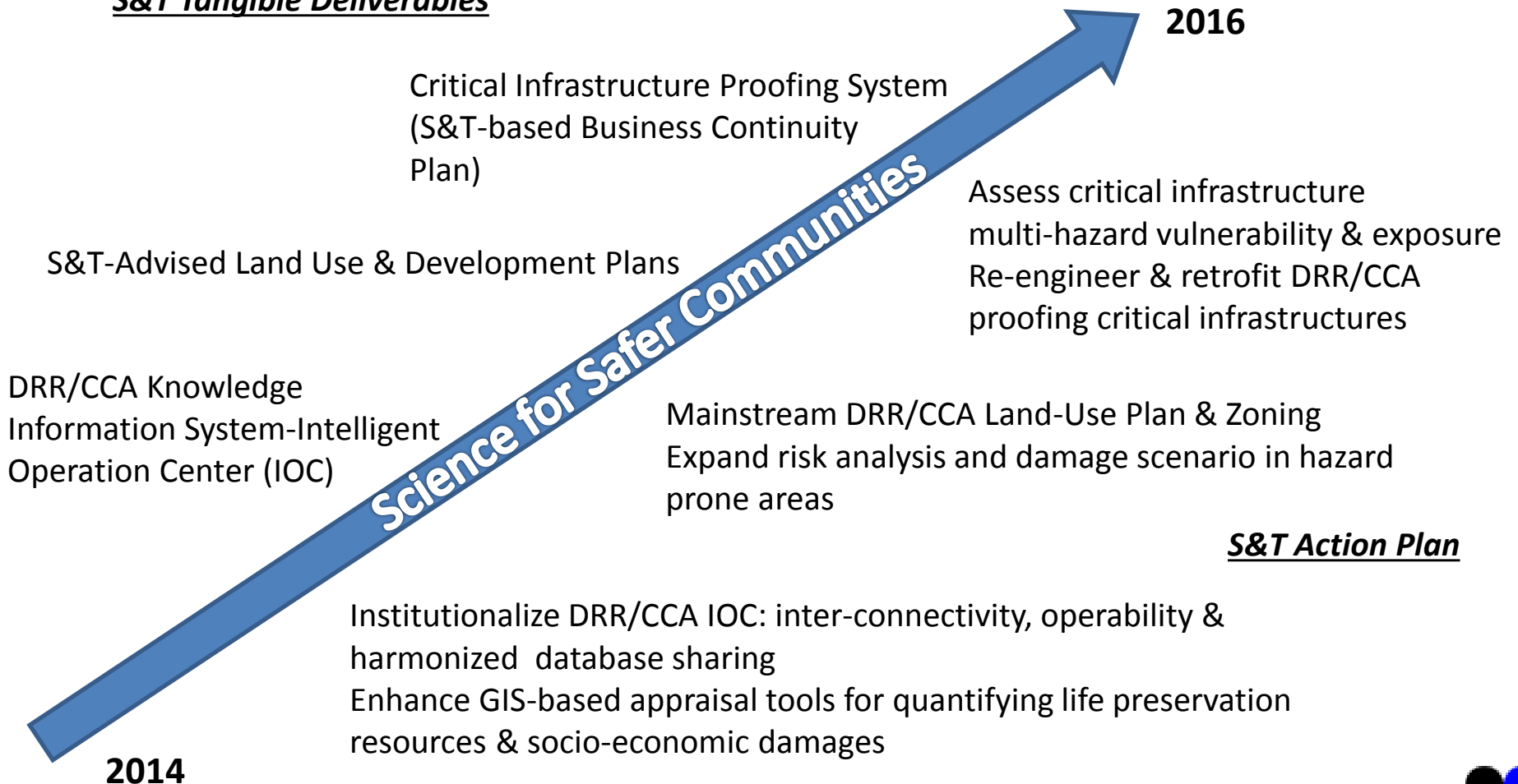


DRR/CCA S&T Roadmap : 2014 - 2016

Short-Term Resiliency Goal: 2016



- S&T-based integrated DRR/CCA decision support system
- DRR/CCA Infrastructure Proofing

S&T Tangible Deliverables



DRRM ROADMAP

PRIORITIES	RESEARCH DOMAIN	SPECIFIC ACTIVITIES	TIMEFRAME								EXPECTED OUTPUT		
			2013	2014	2015	2016	2017	2018	2019	2020	2013 - 2015	2016 – 2020	
Hazard and Risk Assessments	Hazard and risk assessment tools and systems	Assessment for multi- natural hazard exposure, vulnerability and capacity of different communities/LGUs	→									Hazard and exposure database and determination of local capacities	Regional SUCs are able to provide R&D support for Hazard and Risk Assessment to LGUs
		Multi-natural hazard mapping	→								Multi-natural hazard mapping		
		Capacity building of Regional SUCs in the use of hazard and risk assessment tools and systems to support LGUs	→								Capacity building of SUCs in hazard and risk assessment to support LGUs		
End-to-end Multi-Hazard, Multi-Platform Early Warning System	Localized decision support system	Development of hazard data, vulnerabilities and risk hazard measurement and logging system	→									Technologies developed, pilot tested and rolled out Provincial-, municipal- and city-scale end to end early warning system	SUCs operate and provide support to local decision support systems to LGUs and local communities
		Capacity building of Regional SUCs in development of exposure database and use of decision support systems to support LGUs and local communities	→										
	Meso-scale hydro-meteorological	Installation of community – based, near – real time multi – hazard monitoring system outside the scope of the 18 major river	→										

	hazard monitoring and early warning systems	basins									
Disaster – ready Systems and Infrastructures	Cost-Effective Disaster Emergency and Rescue Utility Systems	Design and development of low-cost and locally-manufactured, easily deployable frontline command module system for disaster emergency and rescue utility									<p>Low-cost and locally-manufactured, rapid and easily deployable frontline mobile command module and system for disaster emergency and rescue utility for on site- incident command system which could provide high quality, real-time audio and video feed in disaster affected areas</p> <p>Robust and smart infrastructure designs, building techniques and low-cost indigenous building materials</p> <p>Deployment of low-cost and locally-manufactured, instrumentation systems for deployment and installation in disaster prone major urban centers</p>
	DRR/CCA Proofing Infrastructure	Development of multi-hazard – proof and climate smart infrastructure designs, building materials and construction									

Systems and Techniques	techniques									
Instrumentation for early warning, monitoring and rapid assessment	Development and deployment of portable, on-line and telemetered system for data-gathering, natural hazard detection mechanisms/ systems for early warning in major urban centers	→								
	Strengthening partner's capability and transfer of technology in development and maintenance of early-warning instrumentation and rapid assessment	→								

SUCs and other partner organizations are fully capable of replicate, operate and provide technical support to LGUs

Disaster Risk Reduction & Climate Change Adaptation S&T Action Plan Concept 2016 – 2018

Rationale:

The Philippines is highly vulnerable to numerous natural hazards and climate change because of its geographical location. According to UN study, the country ranks third in the list of most vulnerable to climate change. As such, the government recognized the importance of scientific knowledge and evidence-based technique in managing disaster risk and disaster events. The application of science and technology can substantially reduce losses of lives and property. The Action Plan supports the efforts of the national government in achieving its goals for a “Safer, Adaptive and Disaster Resilient Filipino communities toward sustainable development.”

Situation: Localization of hydromet monitoring stations, hazard mapping and modeling

Gaps: Insufficient capability of regional/provincial institutions on DRR-CCA data interpretation and equipment/system maintenance

Fragmented data collection, sources, and management

Inappropriate critical infrastructure standards/guidelines for extreme natural disaster events

Insufficient decision support tools in assessing critical infrastructure

Delayed recovery and restoration of critical infrastructure and utilities

Determine status of hazard mapping and identify gaps

Strategies

Multi-platform DRR Information Hub

A decision support system will integrate disaster-related information (e.g. hazard maps, risk assessments, EWS data, demographic profiles, pre-positioning and allocation schemes for disaster relief supplies, disaster volunteers, evacuation houses, etc.) Both decision makers and other stakeholders will benefit from the multi-platform disaster information portal that they can use for disaster monitoring and coordination. Mandated agencies and/or academe will acquire disaster forecasts/reports analyzed by competent disaster scientists.

- **Local DRR Information Hub**

Disaster and other pertinent data from National Agencies, Private Organizations, and Foundations will be collated by this LDRRIH which will

translate and disseminate information to the concerned LGUs in their local vernacular. The Center will be operational 24/7.

Business Continuity Plans

Offices are to make plans and arrangements to ensure the continuous delivery of critical services and products even during (and/or after) a disaster. This will include the rapid recovery of facility, data, and assets.

Decision Support Tool for Critical Infrastructure

Establishment of testing facilities for the assessment of the integrity of critical infrastructures

Modeling tools and equipment to assess critical infrastructure

Micro-zoning mapping for medium- and high-rise structures

Natural Hazard Mapping

High-resolution hazard mapping (1:5,000 scale)