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**Presentation by Mr. Mathieu Fontanaud, Advisor for Disaster Risk Reduction of the ACS, on the progress of the project: “Strengthening Hydrometeorological Operations and Services in the Caribbean Small Island Developing States Phase 2 (SHOCS II)”.**

**Association of Caribbean States – Finnish Meteorological Institute  
SHOCS II**

**Presented by  
Mathieu Fontanaud  
ACS Transport and Disaster Risk Reduction Adviser**

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**PART I - SHOCS in brief**

**STRENGTHENING HYDROMETEOROLOGICAL OPERATIONS AND SERVICES  
IN THE CARIBBEAN SIDS (SHOCS)  
Phase II: 2013-2015**

- Partners
  - Association of Caribbean States (ACS)
  - Finnish Meteorological Institute (FMI)
- Funding and Governance:
  - Ministry of Foreign Affairs of Finland
  - Institutional Cooperation Instrument (ICI)
- Budget: 1 Million Euros



## Stakeholders

- **Project Board:**

- ACS
- FMI
- CDEMA
- WMO
- CMO
- CIMH



- **Principal beneficiaries:**

- Disaster Management Agencies
- National Meteorological and Hydrological Services

- **Indirect stakeholders**

- Rescue units,
- NGOs,
- schools,
- women's groups
- community focal points

## PART II

### Results of SHOCS I

#### Capacity assessment

- Capacity assessment on future needs of development:
  - Focus on MHEWS and DRR
  - In 16 SIDS (Dec 2011 – March 2012)
  - Participation from the NMHS, DMA and related regional and local organizations

#### QMS for Aeronautical Meteorological Services

##### Milestones for completion of QMS requirements

(1) 1st QMS WS (May 2011)

(2) 2nd QMS WS (Dec 2011)

(3) Final (WS) (Nov 2012)

Participating NMHSs from	1	2	3
Anguilla	56	58	61
Antigua & Barbuda	46	54	95
Aruba		84	
Bahamas	32	58	90-95
Barbados	15	36	50-55
Belize	30	51	55-60
British Virgin Islands	65	74	
Cayman Islands	42	58	
Curacao	48	63	
Cuba	41	70	90
Dominica	25	41	45
Dominican Republic	90	76	100
Grenada	20	57	90
Guyana	59		70
Jamaica	29	18	95
St Kitts (& Nevis)	21	34	80
St Lucia	25	57	62
St Maarten		57	
St Vincent & Grenadines	62	76	85
Suriname	31	76	50-70
Trinidad & Tobago	37		80-85

## PART III

### SHOCS II

#### Objective of SHOCS II

- **PROJECT PURPOSE :**

To strengthen the role and enhance the capacity of the Association of Caribbean States, National Meteorological and Hydrological Services and Disaster Management Agencies in the selected SIDS to help mitigate impacts of natural hazards.

- **EXPECTED RESULTS:**

**Result 1:** improved operational capacity of the NMHSs to provide weather and climate services

**Result 2:** enhanced role of ACS and Improved capacity of the NMHSs and DMAs for the governance of the early warning process

#### Budget

Activity	2013-2015
A1.1 Restoration of Automated Weather Stations, implementation of data Quality Control, storage and sharing	180,135 €
A1.2 Implementation of tools for analyzing, forecasting and preparing service products	295,163 €
A1.3 Enhancing communication of climate information to the Caribbean communities - Preparation of a climate service portal at CIMH	60,425 €
A2.1 Capacity building on institutional governance through Quality Management	68,781 €
A2.2 Development and implementation of solutions for common presentation and communication of early warnings	122,382 €
A2.3 Enhancing presentation skills of Early Warning information to different sectors of the society - Training on a TV broadcasting solution	173,085 €
A2.4 Project meetings	69,280 €
Contingency	30,748 €
<b>Grand Total</b>	<b>1000,000 €</b>

## Enquiry to participants

- Sent to all NMHSs and DMAs on June 27, 2013
- By the end of September, all answered

Activities better focused on the interest of participating countries

Country	A1.1					A1.2		A1.3		A2.1		A2.2		A2.3	
	AWS restoration					SmartMet		Climate services		QMS training		EWS tools		TV presentation training	
	Relative importance of this activity (high; < low)	Number of AWS stations, sites maintained and operated by your NMHS	Number of AWS reporting internationally (OTS)	Number of conventional station reporting internationally (OTS)	Number of AWS reporting internationally (OTS) - <b>High importance</b>	Importance	Type of validation requested -> suggested	Importance	Interested to participate in meetings	Importance	Request assistance/QMS Auditor training	Importance	Interested to participate in meetings	Importance	Number of trainees indicated
Antigua & Barbuda	1	5	1	1		MS		+		+		+		1	
Bahamas	1	23	23			-	-	3	+	2		-		-	
Barbados	1	3	1	1		MS/PS		+		+		+		1	
Belize	2	6	0	0		MS -> PS		4	+	3	+	6	-	5	
Cuba	5	38	0	20		MS/PS		6	+	4	+	1	+	3	nn
Dominica	-	?	?	?		PS -> O		-	+	-	+	-	+	-	2
Dominican Republic															
Grenada		4	4	1		PS		+		+		+		?	2
Guyana	6	11	11*	0		MS -> PS		5	+	2	+	3	+	4	2
Haiti															
Jamaica	2	18	0	2		6	-	3	+	4	-	1	+	5	2
Saint Lucia	1	20	0	2		3	PS	5	+	2	-	6	+	4	2
St. Kitts & Nevis (NMHS & DMA)	2	2	0	0		-	-	(5) (3)	-	1	+	4 1	+	6 3	2
St. Vincent & Grenadines	1	4	4	1		4	PS -> O	3	-	2	+	5	+	6	tbd
Suriname	3	1	1	3		2	MS -> O	6	+	1	+	4	+	5	nn
Trinidad & Tobago	5	7	0	2		1	MS	-	-	2	+	3	-	-	

## 1.1 AWS restoration and data distribution

- Training and consulting:
  - Maintenance of existing Automatic Weather Stations
  - Rehabilitation of at least 1 AWS/SIDS
  - Aquisition of hardware
  - Compilation of metadata and increase in the volume of data shared (locally, regionally and internationally)

### **Activity 1.2: SmartMet (created by FMI)**

- Enhancing tools for weather forecasting:
  - 3 SmartMet main sites (Cuba, Barbados and Antigua and Barbuda)
  - 8 Smartmet remote sites (Belize, Guyana, Granada, St Lucia)
  - Training to improve quality, visualization and communication of hydromet data

### **Activity 1.3: Climate services**

- Enhancing communication of climate information to the Caribbean communities:
  - Support to CIMH in its role as a RCC
  - Develop a service portal on climate information
  - Demonstrate present temporal and spatial variability of climate
  - Include climate outlooks and scenarios

### **Activity 2.1: QMS training**

- Capacity building on institutional governance:
  - 2-3 workshops of (3 days) to train for QMS 10 internal auditors
  - Next workshop scheduled for the 1st week of December (in Trinidad or Barbados)
  - Participating countries will be supported financially

### **Activity 2.2: EWS tools**

- Common presentation and communication of early warnings:
  - Harmonization of symbols, colors and risk levels
  - Implement the Common Alert Protocol CAP
  - Preparatory workshop (3-4 days) in Nov.

### **Activity 2.3: TV presentation training**

- Training on a TV broadcasting solution:
  - Investment on a TV- presentation hardware and software
  - Training workshops lasting 5 weekdays
  - At least 16 participants to be trained
  - 3 trainers identified:
    - José Rubiera (Cuban Insmet)
    - Ms Caesar (CIMH)
    - Ms Saukkomen (FMI)

## Timeline

Project start	April 2013
Signing MoU between ACS and FMI	May 2013
Inquiry on SIDS interests on Activities	Jun-Sep 2013
1st workshop on delivery of warnings	Nov 2013 Barbados
1st QMS Auditing Workshop 2nd QMS Auditing Workshop	May 2013 Bahamas Dec 2013 T&T

Project Management	
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Project documents and info:
<a href="http://knowledge.fmi.fi">http://knowledge.fmi.fi</a>
Login as 'Guest' -> Caribbean SIDS -> SHOCS II

**Thank you!**

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