

Action Plan

- Summit Goal:
 - Define specific requirements of the water quality system components and develop a plan to implement an integrated end-to-end water quality monitoring and forecasting service
- Summit Deliverable: Action Plan:
 - a phased action plan including
 - baseline (goal, ample funding) and
 - threshold (funding constrained)
 - service build-outs, with both
 - a short-term (0-5 year) build-out plan for pilot/prototype regional service(s)
 - and a long-term (6-10 year) plan
 - for a global-scale water quality monitoring and forecasting service.

How do we construct the plan

- Free brainstorming on useful actions:
 - Definition of requirements (service – now, satellite – future)
 - Demonstration products, pilot services
 - support to SDG process
 - Technical implementation of production capacity
 - Product generation and service delivery
 - Workshops
 - Publications
 - Training sessions
 - Algorithm intercomparison & development
 - Fund raising
 - ...

A plan to define the action plan

1. What shall be achieved when the plan has been implemented?
→ objectives and elements of the *global-scale water quality monitoring and forecasting service* - previous session
2. What is the overall schedule to achieve this goal? ✓
Short Term: 2015 – 2020, pilot / regional service → list of objective available
Long Term: 2020 – 2025, global scale full service
3. What are the critical milestones that we have to reach?
→ define them now based on the strategic implementation plan
4. Milestones focus on major progress points that these milestones?
must be reached to achieve success

- 5 year objectives

- Establish harmonised integration of system elements in the global system of systems
- Establish two way dialogues with different user communities including more developing regions and other international players, such as World Bank, Global Flood Partnership
- Community of practice clearer definition
- Harmonisation: standards used when communicating with end users, select one (?)

- 10 year goals

Critical Milestones

| What (MS Description) | When | Success measures | Actions required to achieve it | Responsible person/organisation | Comments |
|-----------------------|------|------------------|--------------------------------|---------------------------------|----------|
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Milestone #1:

- What:
 - baseline:
 - threshold:
- When:
- Measures of success:
- Action 1.1:
 - What:
 - Who:
 - When:
- Action 1.2:
- ...

Strategic Plan – Functional Breakdown

- Portfolio of Services
 - Working Group on definition of global products; simple indicator (e.g. health index)
 - Functional working group(s) to connect the existing operational capacities:
 - Harmonisation, standardisation, Quality Standards, link to GEOSS portal ...
- Demonstrations and Pilot projects
 - generate demonstration products
 - matrix: scale versus sector (Arnold)
- Research
- Contributions to key global WQ activities (SDG)
- Capacity Building
 - tools, training
- User Federation and Outreach
 - User federation and user consultation meetings (requires identification of users ;-)
 - Workshops
 - Training material
- WQ CoP Secretariat

Components of the global-scale water quality monitoring and forecasting service

- Target users
 - user 1
 -
- Products and services
 - service 1
 - ...
- Technical components
 - component 1
 - component 2
 - ...
- Operators and Service providers
 - ...
- Capacity building, dissemination and outreach
 - ...
- Policies
 - ...

| What (MS Description) | When | Success measures |
|--|---------|--|
| 1 global product available | Apr 16 | Data product QC'ed, documented and out on the Web |
| Proposal for a inland WQ ECV ready | July 15 | White paper submitted to TOPC |
| White paper to NRC | Oct 15 | White paper submitted to NRC |
| Catalogue (meta data) about existing services | Jun 17 | |
| Demonstration of a linked System of Systems | Jun 17 | (1) Technical link of regional systems (2) Link of data source (needs rephrasing) |
| User Work Plan agreed and published | Apr 16 | |
| Working Group on def. of global products: publication draft ready for submission | Jun 16 | |
| Report on Interactions with UN organisations | Dec 17 | |
| WQ Group improved recognition at GEO and public visibility | | (1) Formally accepted as CoP (2) WQ proposed as a Flagship |
| Preliminary suite of global WQ products implemented (indicators, Sentinels, VIIRS) | Apr 20 | |
| Transisiton from regional to global system, knowledge transfer progress report | Apr 20 | |
| WQ CoP Secretariat and work plan in place | Apr 16 | Regular progress reports of the WQ CoP |
| Draft and maintain a WQ research agenda | Dec 16 | |

Milestone #1:

- What: 1 global product
 - baseline:
 - threshold:
- When: April 2015
- Measures of success:
 - Product QC'ed, documented and out on the WQ CoP Web
- Action 1.1:
 - What:
 - Who:
 - When:
- Action 1.2: Sentinel 2, Sentinel 3 + VIIRS
- ...

Milestone #2:

- What: User Work Plan agreed and published
 - baseline:
 - threshold:
- When:
- Measures of success:
- Action 2.1:
 - What: Compilation of stakeholder directory; structure it (user typology)
 - Who:
 - When:
- Action 2.2:
 - What: Compile a user engagement and outreach plan
 - Who:
 - When:
- Action 2.3:
 - What: Iterate the plan with key users (with help of GEO)
 - Who:
 - When:

Milestone #3:

- What: Meta information System
 - baseline:
 - threshold:
- When:
- Measures of success:
- Action 3.1:
 - What: compile list of existing service and products
 - Who:
 - When:
- Action 3.2:
 - What: establish a database that contains informations about existing services: products, processing service, ...
 - Who:
 - When:
- Action 3.3:
 - What:
 - Who:
 - When:

Milestone #4:

- What: Demonstration of linked System of System building on OGC standards and linking remote sensing data, in-situ data and models
 - baseline:
 - threshold:
- When:
- Measures of success:
- Action 4.1:
 - What: PML lead example: inland water
 - Who: PML (w/BC), EMI, MUMM
 - When:
- Action 4.2:
 - What: CSIRO lead example
 - Who:
 - When:
- Action 4.3:
 - What: NOAA lead example on coastal waters
 - Who:
 - When:
- Action 4.3:
 - What: Link the different data sources and models
 - Who:
 - When:

Milestone #5:

- What: Interactions with UN Organisations Report ready
 - baseline:
 - threshold:
- When:
- Measures of success:
- Action 5.1: see Arnold's list (UNEP interactions)
 - What:
 - Who:
 - When:
- Action 5.2: define requirements for in-situ data from GEMS-Water
 - What:
 - Who:
 - When: asap
- Action 5.3: contribution to SDG
 - What: look into recent drafts, contribute
 - Who:
 - When: cost-effectiveness is due in May 15; indicators framework (incl. EO) first draft in July 15

Milestone #6:

- What: WQ Group improved recognition at GEO and public visibility
 - baseline:
 - threshold:
- When:
- Measures of success:
- Action 6.1: Get WQ CoP formally accepted
 - What:
 - Who:
 - When:
- Action 6.2: Investigate if WQ shall be proposed as GEO Flagship
 - What:
 - investigate if a proposal is feasible (resources?)
 - Draft application
 - Who:
 - When:
- Action 6.3: Competition on application developments, use as show-cases; provide a price
 - What:
 - Who:
 - When:

Milestone #7:

- What: Preliminary suite of global WQ products implemented (indicators, Sentinels, VIIRS)
 - baseline:
 - threshold:
- When: 2020
- Measures of success:
- Action 7.1: V1 suite: L8, VIIRS
 - What:
 - Who:
 - When:
- Action 7.2: V2 suite: V1 + S3
 - What:
 - Who:
 - When:
- Action 7.3: V3 suite: V2 + SAR
 - What:
 - Who:
 - When:

Milestone #8:

- What: Secretariat and Workplan in place
 - baseline:
 - threshold:
- When: 2020
- Measures of success:
- Action 7.1: investigate funding for a part-time position
 - What:
 - Who: Paul Digiacomio
 - When:
- Action 7.2: Draft a work plan for the WQ CoP
 - What: example: report of the Geneva 2007 meeting; shall be regularly updated
 - Who:
 - When:
- Action 7.3: Fund raising
 - What: Identify potential funding opportunities
 - Who: all, Mark D
 - When: report back, analyse the situation by early 2016

Milestone #9:

- What: Draft and maintain a WQ research agenda
 - baseline:
 - threshold:
- When: review every 2 years
- Measures of success:
- Action 7.1: Formulate research requirements
 - What: currently identified research topics:
 - protocols harmonisation
 - Algorithms ...
 - Who:
 - When:
- Action 7.2: Lobby for R&D activities on modelling and forecasting through EO data assimilation; link to GODAE (coastal)
 - What:
 - Who:
 - When:
- Action 7.3:
 - What:
 - Who: