



Strategic Framework

DeltA Alliance

September 2010

revised after:

- **7 June 2010 strategy session in Shanghai**
- **25 June 2010 Advisory Board meeting in Wageningen**
- **Meeting with Board of Knowledge for Climate**
- **Several meetings with relevant stakeholders in The Netherlands**

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1. Introduction

This Strategic Framework outlines the objectives, working strategy and financial plan for the development of the Delta Alliance network organization. The central motivation for creating Delta Alliance is to provide a foundation and framework for successful international cooperation that will support more effective and efficient responses to increasing pressures in river deltas worldwide. In short, to improve the resilience of the world's deltas.

Delta regions are especially vulnerable in the context of current and future global changes, including climate change, population growth, and increasing economic activities,. Each delta in the world has developed on a unique path, experiencing its own problems and developing its own coping mechanisms. Over time problems have become increasingly complex as they became embedded in complex human processes. The increasing stress that human activities have put on delta regions is approaching the limitations of the natural and human systems developed in these vulnerable regions.

The time available to address the global problems of climate change, population growth and economic development is short, and the challenges are huge. The current path is not leading us quickly enough to solutions. Delta Alliance should provide a framework to support the symbiosis of the countless activities ongoing in delta regions, reducing unnecessary overlap and identifying gaps in efforts. Delta Alliance will be a vehicle for increased cooperation between parties in river deltas worldwide, with the ultimate aim of improving the resilience of the world's deltas through more integrated and effective efforts.

Scoping activities for the Delta Alliance network have been led by Alterra / WUR since April 2009 , commissioned by the Knowledge for Climate programme of the ministries of The Netherlands. This Strategic Framework is an outcome of the scoping activities, which explored opportunities for an international delta network starting with partners in California, Indonesia, The Netherlands, and Vietnam. The development of Delta Alliance has been and will continue to be a dynamic process, requiring periodic review of the strategy for developing the network. This document is the first chart for navigating the development of Delta Alliance, laying out a mission for the organization and a strategy for embarking upon our mission realization. It describes the vision on the strategy per September 2010.

2. Mission Statement

The mission of Delta Alliance is to improve the resilience of deltas worldwide.

Delta Alliance will be a long-term partner to delta regions around the world as they strive to increase their resilience.

3. Delta Alliance Resilience Strategy

The strategy for realizing the Delta Alliance mission is summarized below. This strategy depends upon close cooperation with many partners, which will be detailed throughout 2010 and 2011.

The Delta Alliance mission will be realized by:

1. envisioning and defining resilience for deltas;

Short Term (2010 – 2012)

- create visions for resilient deltas with stakeholders in the deltas
- create a Resilience Working Group to formulate a resilience framework for defining and measuring resilience in deltas including criteria and measurable indicators.

Long Term (2012 onward)

- create visions with deltas where there is interest to join Delta Alliance
- refine and improve the resilience framework

2. measuring and monitoring resilience;

Short Term (2010 – 2012)

- Delta Comparative Overview in 2010

Long Term (2012 onward)

- annually measure resilience in select deltas according to resilience framework by integrating available data from across the delta
- identify gaps in available data and information

3. reporting and creating pressure for improved resilience;

Short Term (2010 – 2012)

- invite organizations and individuals, including high level representatives from across sectors, to sign the Delta Alliance Declaration

Long Term (2012 onward)

- Regular (every 2 years?) “Report Cards” on the resilience of select deltas, that give both a quick summary of the resilience of the delta and detailed information on specific indicators – to be presented at an annual Delta Alliance – World Estuary Alliance event
- prizes for deltas that have improved their resilience since the previous Report Card
- presentations at international events by members of the Resilience Working Group and Delta Alliance ambassadors

4. providing inspiration for improved resilience;

Short Term (2010 – 2012)

- showcase best practices and lessons learned from across deltas for both preparedness and response

Long Term (2012 onward)

- host design sessions in selected deltas during annual Delta Alliance and World Estuary Alliance event, which include practitioners and experts from deltas around the world

5. and providing assistance for improved resilience.

Short Term (2010 – 2012)

- create international Delta Response Team to provide rapid support when damaging events occur
- attract funding and invest in projects that contribute to improved resilience in deltas
- co-create innovative projects with partner organizations, funding agencies, governmental and non-governmental organizations, private sector and/or research and policy programs
- strengthen the international delta network in exchanging information and expertise resources in and between deltas worldwide
- create Young Delta Alliance to support the Resilience Working Group and Delta Response Team

Long Term (2012 onward)

- prepare “guidelines” for delta management and response
- host courses on delta management and response

4. Delta Alliance Declaration

Working principles for Delta Alliance were discussed in a strategy session in Shanghai, June 2010, and the many comments have been used to create the Delta Alliance Declaration. Members and ‘ambassadors’ of the Delta Alliance network will sign the Delta Alliance Declaration. This declaration in combination with the Delta Alliance resilience strategy will be also the guideline for the activities to be undertaken by Delta Alliance.

Delta Alliance Declaration

Whereas:

- Delta Alliance has the mission to improve the resilience of deltas worldwide;
- deltas are highly valuable and vulnerable locations; and
- economic, ecological, and social resilience are interdependent and essential for overall resilience;

The members of Delta Alliance will together develop and share knowledge to:

- envision resilient deltas
- measure, monitor and report resilience in deltas; and
- provide inspiration and support for improved resilience in deltas

In pursuing these goals, the members of Delta Alliance will strive to:

- share knowledge, expertise and best practices between deltas worldwide;
- co-create and integrate knowledge across deltas, sectors and disciplines;
- connect expertise and parties from throughout the watershed;
- incorporate local knowledge in research and knowledge-building activities; and
- provide knowledge and insight to support any use, including education, policy development, investments and disaster response.

5. Milestones and Objectives

Milestones

Objectives are focused on three milestones in the development of Delta Alliance:

1. **Shanghai World Expo, June 2010** - The World Estuary Alliance (WEA), a partner initiative of Delta Alliance, was announced at a conference organized by WWF. Delta Alliance was co-organiser of this Conference and hosted a strategy session with representatives from California, Indonesia, The Netherlands, Vietnam, China, Louisiana, and the Ukraine to create a mandate for the development of Delta Alliance.
2. **Rotterdam Deltas in Times of Climate Change Conference, Sep – Oct 2010** – The launch of Delta Alliance will be celebrated with representatives of amongst others California, Indonesia, The Netherlands, Vietnam and Bangladesh, and the 2010 - 2012 work plan for Delta Alliance will be approved. This conference is co-organized by Knowledge for Climate and the City of Rotterdam.
3. **End of Knowledge for Climate (KfC) Programme, Dec 2013** – By the time the KfC programme ends Delta Alliance will be fully funded and governed by other institutions.

Objectives

Fulfilled by the end of Shanghai Expo, June 2010

1. Confirm and refine the definition, objectives and strategy of Delta Alliance with partners in founding delta regions

To be fulfilled by the end of Rotterdam Conference, October 2010

2. Prepare a smart 2010 - 2012 work plan for implementing the Delta Alliance Resilience Strategy with the Advisory Board and key partners
3. Create an international governance structure for Delta Alliance
4. Initiate an international partnership with World Estuary Alliance
5. Secure written support for Delta Alliance in the form of signees to the Delta Alliance Declaration
6. Preliminary results from the Delta Comparative Overview led by the Dutch Wing, as a first step to monitoring and measuring resilience in select deltas

7. Create strategy for identifying long-term funding for Delta Alliance operations and activities
8. Publically launch the online information platform

To be fulfilled by the end of the KfC Programme, 2013

9. Create a Resilience Framework
10. Contribute to Delta Visions for a number of deltas
11. Co- organise annual Delta Alliance and World Estuary Alliance Conferences
12. Publish the first annual Delta Report Card
13. Create Young Delta Alliance
14. Execute initial Delta Alliance projects
15. Secure structural funding for the continuation of Delta Alliance
16. Implement an international governance structure

6. Strategy Components

Initial Focus Delta Regions

Partners in a select number of deltas will initially be involved in developing the network. Once the network is operational the intention is to broaden the scope of activities and governance to include additional delta regions. Selection of the initial Focus Delta Regions was based on the review performed in the exploration for the KfC International Hotspots. Focus Delta Regions share critical issues with other deltas in the network and also span the issues that are most important to delta regions worldwide.

1. Preliminary Focus Delta Regions are **California, Indonesia, Vietnam and The Netherlands**. These locations each have a representative on the Delta Alliance Advisory Board who also acts as regional coordinator for the network.
2. The locations where contacts have been made and communication initiated are: **Bangladesh, Brazil, China, Egypt and Louisiana**. Partners in these and possibly other delta locations will be invited to participate in Delta Alliance activities in 2010 – 2012.

Mandate Development

During initial outreach to parties in California, Indonesia, The Netherlands, Vietnam and Bangladesh people and organisations expressed much interest in the idea of being involved in an international delta network. A successful network must be designed and built by the network members themselves. For this reason a three-step process is being carried out to develop the Delta Alliance network with partners in each of the four focus deltas.

Delta Alliance

- 1) **Scoping workshops** will be held and **online questionnaires** distributed in focus delta regions to get input from parties on what they want to get from Delta Alliance, and what they are willing to contribute. Scoping workshops will be held in the focus delta regions in April – August 2010. Efforts will be made to reach representatives from all major stakeholder groups in the regions.
- 2) A **strategy session** in Shanghai (June 2010) brought together the initial scoping workshop and questionnaire outputs to define the objectives and strategy for developing the international network. Participants included members of the international Advisory Board, interested parties from other delta regions, and the international secretariat. The output from this session was then finalized in a meeting with the Advisory Board in Wageningen.
- 3) A **planning session** in Rotterdam (October 2010) will operationalize the strategy and set an action plan for Delta Alliance for 2011 and 2012. Participants will include the international Advisory Board and Wing coordinators, and international secretariat.

Online Information Platform

Delta Alliance has a website (www.delta-alliance.org) through which information on the network and its activities is shared. The website is maintained by the Delta Alliance secretariat and is information-giving only. To support interactions and knowledge exchange within an active international delta network, Delta Alliance is developing an interactive online platform in cooperation with the World Estuary Alliance. The aim is to create *the* go-to site for people seeking information, persons, projects or organizations active in deltas, through links to relevant sites and a database that is populated by website users (specialists, organizations and project managers involved in delta and estuary management around the globe). The information platform should not duplicate existing databases. Objectives for the platform are to:

- Provide information on delta and estuary regions worldwide;
- Profile active organizations, projects and research in delta and estuary regions; and
- Announce and report on events that support information exchange and collaboration across sectors, disciplines, and delta and estuary regions.

The site URL is www.delta-zones.com. The platform was announced in Shanghai, June 2010, and will be publically presented in Rotterdam at the Delta Alliance launch celebration.

Organizational Structure

The development of the international Delta Alliance is currently managed by a small project team at Alterra / WUR in Wageningen, The Netherlands. Delta Alliance will become a registered organization (foundation), and a proposal for the organizational set-up of Delta Alliance including stepping stones will be prepared and discussed in Rotterdam in September 2010 with the Advisory Board. Figure 6.1 shows a potential set up for the Delta Alliance organizational structure. Components of the organizational structure may include:

1. Network Members - individuals and organizations from across sectors will sign up as Delta Alliance members by signing the Delta Alliance Declaration and will lead and

Delta Alliance

contribute to Delta Alliance activities. Communities of practice may be developed within the membership. A policy for attracting and securing network membership must be developed;

2. Scientific Panel – in partnership with the World Estuary Alliance, providing input for Delta Alliance and World Estuary Alliance activities ;
3. Advisory Board and Wing Coordinators – providing recommendations on network development and coordinating the regional Wing;
4. International Secretariat – managing daily operations to support the network;
5. Governing Board – determining strategy for network development.

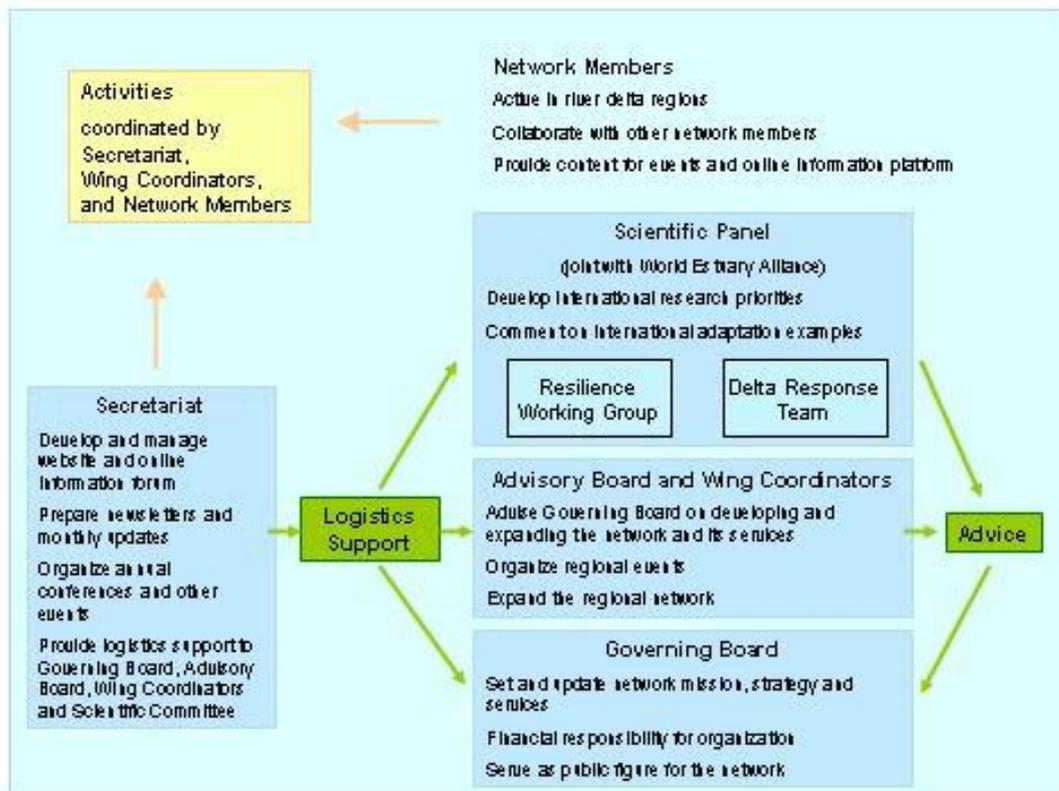


Figure 6.1: Potential Delta Alliance Organizational Structure

Table 6.1: Wing Coordinators and Host Organizations

Wing	Wing Coordinator and Advisory Board Member	Wing Host Organization
California	Peter Wijsman, Arcadis (Interim)	Bay Conservation and Development Commission and Delta Stewardship Council (proposed)
Indonesia	Prof. Jan Sopaheluwakan, LIPI	BAKOSURTANAL – national mapping agency
Netherlands	Dr. Cees van de Guchte, Deltares	Deltares

Vietnam	Prof. Le Quang Minh, Vietnam National University Ho Chi Minh City	To be determined
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Network Wing Development

In each location a Wing Coordinator has been identified who is leading the organization of the scoping workshop, making initial outreach to potential network members in that Wing location, and serving on the Delta Alliance Advisory Board. Additionally, a Host Organization has been identified for three of the wings, which will provide support to the Wing Coordinator and may rotate between member organizations in a network Wing (see Table 6.1). The tasks of the Wing Coordinator include: (i) operationalising the Delta Alliance Resilience Strategy with activities in their Wing; (ii) exploring the possibilities for cooperation with other deltas; (iii) attracting Wing members from a broad range of sectors; and (v) defining an organizational set up of the Wing.

Cooperation Agreements

To build support for Delta Alliance high-level representatives from across sectors will be invited to sign the Delta Alliance Declaration in Rotterdam during the Delta Alliance launch celebration. To ensure long-term financial and structural support for Delta Alliance cooperation agreements will be sought with representatives of international organizations.

Building the Network and Events

The Delta Alliance network is being built through numerous activities, including hosting and representing Delta Alliance at relevant events.

Hosting Events

Delta Alliance is hosting or co-hosting events that bring together individuals and organizations active in delta regions. Delta Alliance is largely organizing events in conjunction with existing events to benefit from relevant groups coming together and minimize travel time and carbon footprint.

The first annual World Estuary Alliance Conference was held in Shanghai in June 2010 and co-organized by Delta Alliance. This was the promising start of a joint Annual Delta Alliance and World Estuary Conferences, alternately hosted by Delta Alliance and World Estuary Alliance. Delta Alliance will host the Conference in 2011. The annual conferences will include design sessions focused on the delta location of the event.

Workshops and courses that bring together parties from multiple deltas and focus on specific issues of interest in delta regions will be organized to build the network and

contribute to providing inspiration and assistance for improved resilience in deltas. As a first example, Delta Alliance supported expertise exchange through the International Workshop on 'Methods and tools for water-related adaptation to climate change and climate proofing', held 8-9 March 2010 in Bandung, Indonesia. The workshop was co-organized with numerous regional and international organizations. Workshops and dialogue sessions will likely be organized by Delta Alliance in the future as a means of contributing to capacity building and implementing the Delta Alliance Resilience Strategy. Partnering with additional organizations to organize and fund the workshops will be a specific focus.

Delta Alliance has hosted or co-hosted the following events:

Symposium: California and The Netherlands - A New Alliance for Climate Adaptation San Francisco, September 2009. Co-organized with Arcadis, the Bay Conservation and Development Commission, The Netherlands Consulate, Alterra / WUR, Deltares, Fugro, and the American Institute of Architects.

Workshop: Methods and tools for water-related adaptation to climate change and climate proofing - Bandung, Indonesia, March 2010. Co-organized with The Cooperative Programme on Water and Climate, Deltares, PusAir, Unesco-IHE, KNMI, BMKG, LIPI, and UNDP.

Visit of High Level Vietnam Delegation to Zeeland and The Hague, April 2010. Co-organized with LNV as part of a larger mission of the delegation to The Netherlands organized by VenW.

Delta Alliance Netherlands Wing Workshop – Rotterdam, April 2010

1st Annual World Estuary Alliance Conference - Shanghai, June 2010. Co-organized with the World Estuary Alliance.

Delta Alliance Vietnam Wing Workshop – Ho Chi Minh City, July 2010

Delta Alliance Indonesia Wing Workshop – Jakarta, August 2010

Delta Alliance Brazil Exploratory Workshop – Brasilia, August 2010

Delta Alliance already has plans to host or co-host the following events:

Sessions of the Deltas in Times of Climate Change Conference - Rotterdam, Sep-Oct 2010. The conference is organized by Knowledge for Climate and the City of Rotterdam.

Indonesia Delta Forum 2010 – Semarang, Central Java – Indonesia, October 2010. Co-organized with Bakosurtanal (National Coordinating Agency for Surveys and Mapping

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of Indonesia), University of Diponegoro, PUSPICS, University of Gadjah Mada, and International Center for Interdisciplinary and Advanced Research (ICIAR-LIPI).

Delta Summit, Jakarta, November 2011. This conference could act as the yearly joint Delta Alliance and World Estuary Alliance Conference 2011.

Attending Events

To build the international delta network Delta Alliance has been and will be presented at international events of relevance to deltas and climate change. During these events the objective is to broaden the network through:

- informing people about the Delta Alliance network;
- gathering contact details and information about existing delta-related initiatives; and
- identifying individuals to take part in Delta Alliance activities and help broaden the network.

Delta Alliance members have been or will be actively representing Delta Alliance at the following events and missions:

Missions of The Netherlands Government to develop and implement Water Mondial (description in section on Partner Cooperation Initiatives) - Vietnam, October 2009 and March 2010 to support the development of a Delta Plan for the Mekong Delta

Combined Delta Alliance and Water Mondial mission - Bangladesh, June 2010 to explore the opportunities for knowledge-to-knowledge cooperation.

Scoping Workshop for DELTAS2010 - Washington, November 2009

UNFCCC Climate Change Negotiations - Copenhagen, December 2009

American Planning Association Meeting on Delta Urbanism, and Dutch Dialogues III - New Orleans, April 2010

Day of the Deltas International Water Conference – Amsterdam, August 2010.

DELTAS2010 Event - New Orleans, October 2010

Student DeltaCompetition 2010 and Young Delta Alliance

To involve students and young professionals in the work of Delta Alliance a student DeltaCompetition is being hosted in 2010 and a Young Delta Alliance will be initiated.

The DeltaCompetition 2010 is jointly organized by Delta Alliance, Royal Haskoning and the City of Rotterdam. It builds upon the success of the 2006 and 2008 DeltaCompetitions hosted by Royal Haskoning. The event will serve to support the work of exceptional students, encourage interdisciplinary and innovative solutions for problems in delta regions, raise

awareness of the emerging Delta Alliance network, and serve as a recruiting opportunity for Royal Haskoning and Young Delta Alliance.

Young Delta Alliance should involve students and young professionals in the activities of Delta Alliance, specifically in supporting the Resilience Working Group and the Delta Response Team of the Scientific Panel. This is to be developed in the first years of Delta Alliance.

Partner Cooperation Initiatives

To implement the Delta Alliance Resilience Strategy Delta Alliance must work closely with the many initiatives that are already contributing to the development, integration, and exchange of knowledge related to deltas. During scoping activities a number of relevant initiatives have been identified, including delta-specific international cooperation initiatives, and cooperation initiatives relevant to but not focused on deltas.

No other network initiatives have been identified that support international cooperation between river deltas and are focused on delta regions as a whole and on an integration of knowledge across sectors. This is a niche for Delta Alliance.

Delta Alliance will continue to seek and actively partner with other initiatives that share common objectives with Delta Alliance, to avoid duplication of activities and achieve a larger impact from activities undertaken.

Delta-specific cooperation initiatives

A number of initiatives exist that are encouraging and facilitating cooperation between river delta regions internationally, yet are distinct in their scope and approach. The initiatives that we are aware of and our partnership with them to date are as follows:

- **Knowledge for Climate (KfC) and Climate for Spatial Planning** – Dutch research programmes for the development of knowledge and services that make it possible to assess investments to be made in spatial planning and infrastructure over the coming twenty years in terms of their resistance to climate change, and for making changes where necessary. Governmental organizations and businesses actively participate in research programming through the input of additional resources. KfC is the main initiator and provides the initial funding for Delta Alliance. It is envisioned that Delta Alliance strives for direct connections between its international Wings and the regional hotspots and research themes of KfC.
- **Water Mondiaal** - the Dutch National Water Plan international chapter focuses on five priority delta countries and aims at establishing long-term strategic relationships between the Netherlands and Indonesia, Egypt, Vietnam, Mozambique, and Bangladesh. Water Mondiaal includes three main focuses: Governance to Governance (G2G), Knowledge to Knowledge (K2K) and Business to Business (B2B) - it is envisioned that Delta Alliance members will play an important role in the development of the K2K agenda of Water Mondiaal. In September and October

2010 negotiations will take place between Delta Alliance and Water Mondiaal on possible cooperation.

- **World Estuary Alliance** – a WWF initiative that aims to raise awareness of the economic and ecological value of healthy estuaries and to stimulate exchange of knowledge and implementation of best practices. The growing network includes representatives from NGOs, business, science and policy makers. The WEA is currently based in Shanghai. Delta Alliance has co-developed an online information platform with World Estuary Alliance, and the two initiatives will share annual conferences and a Scientific Panel and will partner in envisaged activities such as the regular publication of Delta Report Cards. A possible merge with World Estuary Alliance has been discussed during the Shanghai strategy session, but it was agreed that for the time being the two would continue in parallel to benefit from where their networks and objectives are unique
- **Connecting Delta Cities** – an initiative that serves under the umbrella of the C40 with a secretariat located in Rotterdam. A network that connects delta and coastal cities at the forefront of climate change adaptation, it aims to exchange knowledge, share best practices and operate as a showcase. Delta Alliance and World Estuary Alliance are cooperating with Connecting Delta Cities through shared communication materials, cooperation on select events, and assisting in developing networks in common regions.
- **Aquaterra** – an international conference and exhibition on development in coastal and delta regions hosted in The Netherlands every 2 years with the first forum in 2007 - the next edition of Aquaterra will be in 2011. The Comparative Overview of Delta Issues project planned in 2010 will build on the results of Aquaterra 2009.
- **DRAGON** - an international community of practice to share data on the great deltas and rivers of the world and to develop comparative models and visualization tools in order to facilitate ecological forecasting regarding climate change and development that ultimately helps in guiding decision making. Delta Alliance has good contacts with the initiator of DRAGON and will explore the possible role of DRAGON in the monitoring of the resilience of deltas. Outside the US DRAGON is mainly focusing on the Mekong delta in Vietnam.
- **Dutch Dialogues** – three Dutch Dialogue design sessions have been held in New Orleans, bringing together Dutch and Louisiana engineers, urban designers, landscape architects, city planners and soils/hydrology experts to tackle water safety and amenity in New Orleans. Delta Alliance took part in the most recent dialogue in April 2010 and will be involved in future Dialogues in case of any continuation.
- **Delta Dialogues** – dialogues run by Royal Haskoning in deltas around the world. Delta Alliance has participated in some of these dialogues in the past. Delta Alliance will discuss with Royal Haskoning in any future follow up of the Delta Dialogues.
- **DELTA2010** – an invitation-only, hands-on conference focused on designing sustainable development, restoration and protection scenarios for world deltaic regions - being held in New Orleans October 2010, Delta Alliance is actively participating in this conference, the Delta Alliance launch officer will act as a charette leader for one of the sessions.

- **American Planning Association** – a Delta Urbanism Symposium was included in the 2010 National Planning Conference in New Orleans and will be included in their national conferences in Boston in 2011 and in Los Angeles in 2012. Their larger effort to raise awareness and advance research on delta and coastal development includes publications on delta urbanism and international workshops. The American Planning Association (40.000 members) has indicated to become a member of Delta Alliance and is willing to give publicity to the Delta Alliance activities.
- **World Delta Database** - An online database that users can upload information to, with a focus on geological information
- **World Deltas Network** - a data, information, and research support service for deltas, to advance integrated science in the coastal zone, spanning physical, biological, and sociological disciplines. No info/activity since 2005.

Cooperation initiatives relevant to but not focused on deltas

Many international initiatives that are not specific to delta regions are still important players in exchanging information and bringing together parties both in and between delta regions.

The initiatives that we are aware of and our partnership with them to date are as follows:

- **Knowledge Hubs of the Asia-Pacific Water Forum** - a network of regional water knowledge hubs launched in 2008 and supported by the Asian Development Bank (ADB). Each hub is a center of excellence committed to improving water security in the Asia-Pacific region by promoting knowledge sharing and championing feasible solutions for its priority water topic. Together, the hubs collaborate to generate and share knowledge and develop capacity in more than a dozen water knowledge domains. Discussion with ADB is ongoing on the creation of links between the Knowledge Hubs and Delta Alliance.
- **Global Adaptation Network** – UNEP initiative, a multifunctional Global Climate Change Adaptation Network that is being developed for mobilizing the resources of regional centers and ground networks to enhance key scientific, technical and most importantly institutional capacity for adaptation in developing regions. Delta Alliance is in communication with Global Adaptation Network regarding possible collaboration.
- **Netherlands Water Partnership** - a network that unites Dutch water expertise. The partnership, consisting of members from private companies, government, knowledge institutes and NGOs, acts as a centre of information on water expertise, policy developments and market opportunities. It also initiates, coordinates and executes projects for its members, such as trade missions, exhibitions and conferences. NWP is also hosting a Delta Technology Network within The Netherlands. It is expected that many members of NWP will also become member of Delta Alliance through the Netherlands Wing. Delta Alliance could consider to become a strategic partner of NWP.
- **Cooperation Programme on Water and Climate (CPWC)** - aims to stimulate activities in the water sector that contribute to managing the effects of climate variability and change, in particular for the most vulnerable communities. CPWC builds bridges

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between water managers and the climate community, from the local up to the global level. Through increasing awareness of the issues and of potential solutions we seek to set in motion social and political processes that will lead to the adoption of coping strategies and best practices. In many aspects and countries Delta Alliance and CPWC are working closely together. A clearer agreement on the division of objectives and activities should be envisioned before the launch of Delta Alliance.

- **Partners for Water** is a programme that aims to strengthen the international position of the Dutch water sector by uniting forces (private sector, public sector, non-profit sector and knowledge institutes). Partners for Water could be a partner for the funding of Delta Alliance initiated projects.
- **Resilience Alliance** - a research organization comprised of scientists and practitioners from many disciplines who collaborate to explore the dynamics of social-ecological systems. The body of knowledge developed by the Resilience Alliance, encompasses key concepts of resilience, adaptability and transformability and provides a foundation for sustainable development policy and practice. Delta Alliance will be in communication with the Resilience Alliance regarding collaboration on developing a resilience framework for deltas.

Communications

To support Delta Alliance activities and build the network the following media are being used:

- Website
 - Information on Delta Alliance network and activities
- E-Newsletters (via email)
 - Information on upcoming and recent events and relevant news
- Brochures
 - Information on Delta Alliance for use at international events
- Online Information Platform
 - Online forum to support network development and information exchange in partnership with World Estuary Alliance

Other communication means that Delta Alliance intends to make use of include:

- Linked-In groups
- Video conferencing

7. Delta Alliance Projects

Next to the development of the network organization a number of projects will be formulated to implement the Delta Alliance Resilience Strategy, with a focus on providing assistance for improved resilience. Delta Alliance projects should also embody the spirit of the Delta Alliance Declaration.

Delta Alliance has designated funding for projects as follows: 100KEUR for a Comparative Delta Overview in 2010, and 660KEUR for projects starting in 2011.

Comparative Overview of Delta Issues

This project will contribute to the Delta Alliance Resilience Strategy in relation to measuring and monitoring resilience in deltas, and serve as the first Delta Alliance project to link member deltas. As a follow-up to earlier overviews on Delta development management and governance (such as Aquaterra), and based upon readily available information, an in-depth inter-delta collaborative desk study will be performed. This study will be executed among some 6-8 selected deltas, addressing socio-economic and natural impacts and adaptive response measures regarding the most affected sectors.

The output of the project will be a concise comparative overview (booklet) of the current and possible future state of selected deltas. Focus will be on existing state, forecasts, and plans for adaptation to changes, taking into account socio-economic as well as physical/natural aspects.

Lessons learned and the need for knowledge exchange on critical issues will be identified, as well as research gaps and opportunities for collaboration between deltas. Current, planned and considered adaptive measures and practical methods and tools for assessments, planning and decision making will be illustrated, based on current practices and innovative technological developments.

The project will be led by Deltares and executed by the partners of the Delta Alliance from the various deltas included in the study, specifically by the partners of the Delta Alliance Wings.

Projects starting in 2011

In Rotterdam a set of criteria and a package of projects demonstrating the types of projects that Delta Alliance would like to support to improve resilience in deltas will be presented. Delta Alliance will seek additional funders to contribute to the ambitious set of proposed projects. Connecting with the work of the Knowledge for Climate National Hotspots will be a priority for these projects. Projects may be chosen to focus on a select number of topics of themes to streamline the initial work of Delta Alliance and respond to areas of greatest priority to partners. During the Shanghai strategy session participants recommended that Delta Alliance focus on projects related to data access & interoperability, risk assessment & ecoservices, planning & design, with overarching attention to governance, implementation, operation & adaptation.

Examples of the types of projects that may be proposed for some aspects of the Delta Alliance Resilience Strategy are shown below.

measuring and monitoring resilience

- Comparative Overview of Delta Issues
- Improving the Adaptation Tipping Point Method (ATP)

- The ATP approach is very useful for assessing the vulnerability of a delta to climate change. But the approach has not been tested on a range of different deltas. Hence the idea is to make the approach more robust by applying it along a range of deltas.
- Risk assessment and modeling
 - Investigation of future application of downscaled regional climate models to study the impacts of both human welfare, economic perspectives and biodiversity preservation in an integrative way, on an estuary and coastal zone. Such models are used in a number of delta regions, and their outputs and effectiveness can be compared to identify what inter-delta cooperation on modeling may be useful. “Climate atlases” such as exist for The Netherlands may be created for other deltas.
- Adaptation policies and strategies
 - Preparing a report and poster that compare adaptation strategies and policies in focus delta regions. This project can be inspired by and build upon a PEER project comparing adaptation strategies in European countries

providing inspiration for improved resilience

- Sea level rise challenges and responses
 - Creation of a book that describes the expected challenges brought by sea level rise in focus river deltas and presenting examples of how these deltas are responding to these issues. Special attention will be paid to the balance of economy and ecology. This project can be inspired by and build upon a project by Deltares, Alterra and Arcadis in the San Francisco Bay.
- New approach to analyzing Governance in deltas
 - Introducing a new frame for multi-actor analysis and design of governance in delta management. Identifying new opportunities for improved governance in delta management. The project will be focused on a selection of deltas and should enable a comparison of existing governance institutions / arrangements for i) spatial planning, ii) resource use and iii) water infrastructure.

providing assistance for improved resilience

- San Francisco Bay Climate Adaptation Pilot – Planning for Sea Level Rise
- Delta Alliance envisions to jointly prepare with funding agencies like the Asian Developing Bank (ADB), the World Bank (WB) or other development agencies a set of comprehensive investment programs that improve the resilience of several Asian deltas. These investment programs could have a focus on different topics and with for instance water management and climate change as crosscutting issues. As examples based on foreseen and ongoing activities of ADB, WB and/or Delta Alliance members the following combinations of deltas and topics could be envisioned:
 - Ganges/Brahmaputra– salt intrusion and fresh water availability
 - Jakarta/Ciliwung – urban flooding / IWRM
 - Mekong – capacity development and/or agriculture
 - Yangtze – nature conservation

The funding mechanisms could indicatively be developed as shown in the table below supposing that Delta Alliance will attract enough core funding to initiate and support such activities. Preferably Delta Alliance members should be involved in all phases of the investment program. A first exploratory discussion on such a joint preparation of investment programs has taken place with the ADB in June 2010.

Project Phase	Funding		
	Type of funding	Delta Alliance	Funding Agency
Fact Finding	grant	50%	50%
Feasibility study	grant	25%	75%
Business case or investment preparation	grant	0%	100%
Investment program/ project implementation	loan	0%	100%

8. Funding

The Knowledge for Climate Programme of The Netherlands has provided €1.8 million start-up funding for the Delta Alliance network. Equal co-financing is required for this funding. The budget for the development of Delta Alliance is divided as shown in Table 6.1.

Table 6.1: Overview Delta Alliance budget (in K€)

Activity	Phase 1	Phase2	Phase 3	Total	%
Organizational development	59	124	75	258	14
Networking	82	535	125	742	41
Projects	0	125	660	785	44
Miscellaneous	4	5	7	16	1
Total	145	789	867	1800	100

Co-financing for the €1.8 million will be calculated as a whole, e.g. not requiring 50% co-financing for each item, but 50% co-financing overall.

Co-financing for the Delta Alliance development activities will be partially secured through co-organizing events and projects with partner organizations and through building upon work previously done that contributes towards inter-delta cooperation activities. 50% co-financing will be secured for the entire project budget by the end of the project. During the first phases of the network development it is expected that co-financing will be less than 50%.

Long-term Financing

Long-term financing is critical for the continuation of the Delta Alliance network. A portion of the budget from Knowledge for Climate has been dedicated to supporting the network operations and cooperation projects in 2009-2012.

Delta Alliance

Knowledge for Climate, being a research programme with a limited lifespan, will not be a long-term financier of the Delta Alliance network. Long-term sponsors and/or income of the network must be confirmed before the financing from KfC comes to an end, and ideally by the time of the official launch of Delta Alliance in Sep-Oct 2010. A detailed strategy for attracting long-term financing for the network will be submitted to KfC after the Rotterdam Conference in September/October.

There are three primary methods for long-term financing of the network operations and activities: membership charges, sponsorship from organizations, and project financing.

Membership Charges

Membership charges may be a more reliable means of continuation financing than donor support. They also confirm that the services being provided by the Delta Alliance network are of value to members. Membership Charges must be formulated in such a way that both organizations and individuals can access the network and its services, and that sufficient income is received to support network activities.

Funding from Donor Organizations

The possibilities for further funding from governmental and non-governmental organizations and international funding institutes will be explored during the development of Delta Alliance, with results presented in December 2010 and at the end of the KfC programme.

Project Financing

Projects that are undertaken in the framework of Delta Alliance will be co-created with and (co-)financed by other partners.

Organizations with an interest in adaptation, and in particular in delta regions, will be invited to sponsor the activities and/or operations of Delta Alliance.