

Standardisation of the development of a climate adaptation strategy

Possibilities, limitations and practical
example

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27/04/2018

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 - Aim
 - Context
 - Practical limitations
- RESIN e-Guide
 - Offered support
 - Approach to limitations in standardization
- Relation to other platforms

Standardisation aim

- Uniformity in:
 - Quality of decision process and results
(walking the right path, doing the right things)
 - Considered aspects
(looking at the right things)
 - Level of detail considered
(zooming in to the right level)

Standardisation limitations

- Process:
 - One complete process iteration is long and complex
 - By nature iterative, therefore any step within process is likely to be visited more than once
 - Urban, multi-stakeholder, political context → limited control over sequence of steps
 - Usually combined effort of multiple people focusing on various topics related to climate adaptation → several tracks of climate adaptation in parallel, hard to keep efforts aligned
- Conclusion: **strict sequential process unpractical or impossible**

Standardisation limitations

- Outcomes:
 - Various ways (tools, methods) to complete any step in process, not always compatible, not always same quality / level of detail
 - Not every approach suited for every situation
 - Interdependency on choices for approaches ==> choose approach x in early step ==> no longer possible to choose approach y in later step
 - Need for guidance to produce consistent results, fitting the requirements of the city <> not always most detailed is best
- Conclusion: flexibility is needed, but comes at the cost of strict compatibility of results

RESIN e-Guide

Support for uniform process

Flexibility in sequence process requires good overview and collaboration tools.

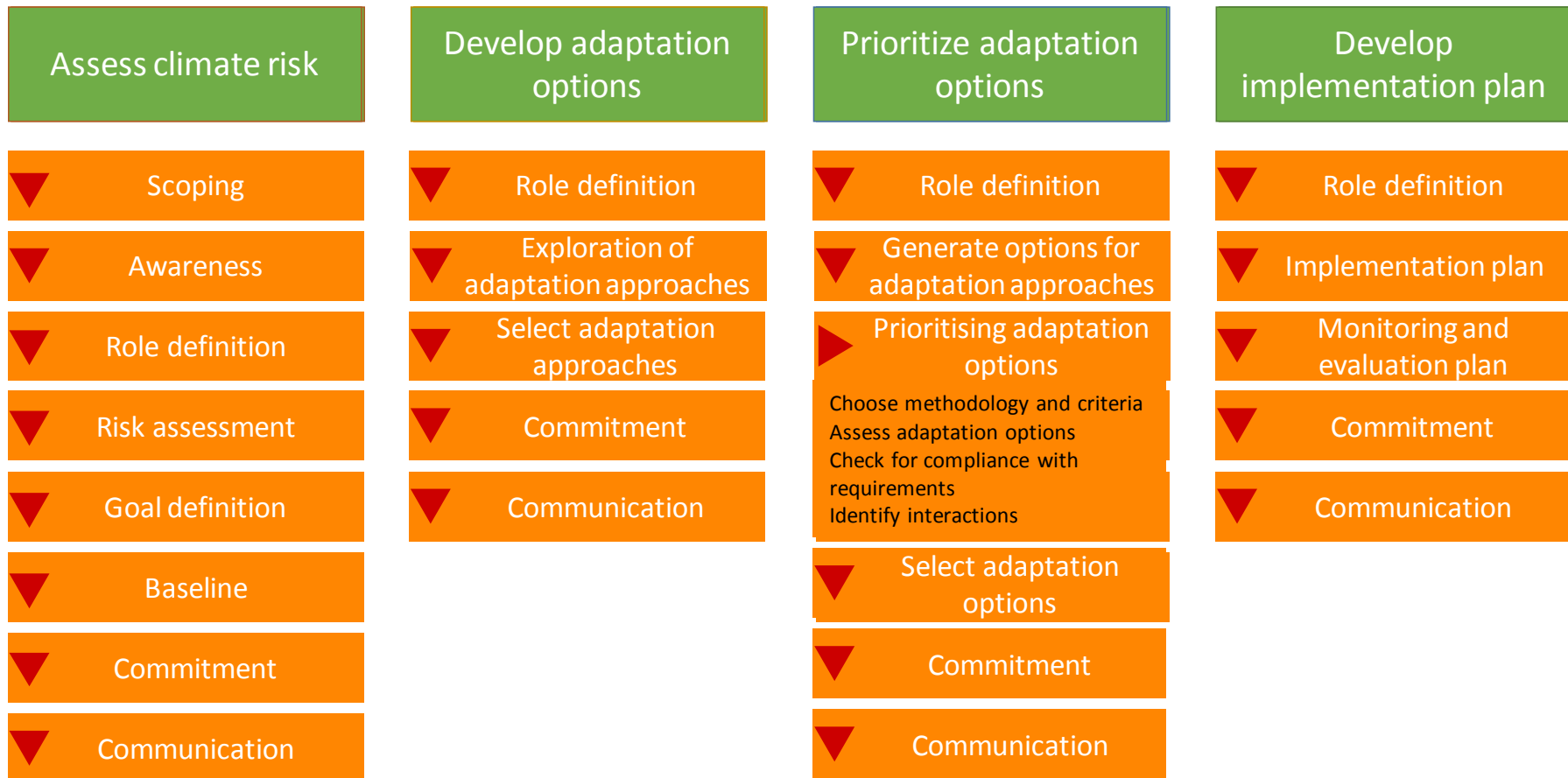
- Overview all steps and their relation → know what's coming
- Structure allows for starting and stopping at any step, but with informed consequences: prerequisites to finish each step successfully, consequences for following steps*
- Functionality to:
 - Coordinate activities between various employees
 - Store results of adaptation process and make them available centrally
 - Monitor progress over the entire adaptation process

*optional: Restrict progress to allowing only starting steps for which all preconditions have been fulfilled

RESIN e-Guide

Support for uniform process

- Example overview steps



RESIN e-Guide

Support for uniform process

- Example step description preconditions

Climate Threat.

[Edit](#)

Goal of this aspect

Having identified a problem in [Problem definition](#), this aspect concerns the exploration of the underlying causes of this problem and gaining preliminary insight in their severity. With regards to [climate change](#) in Europe, five [climate](#) threats can be distinguished:

- [heat waves/stress](#),
- [pluvial flooding](#),
- [fluvial flooding](#),
- [coastal flooding](#) and
- [drought](#).

Preconditions

Having a clear [Problem definition](#) is essential for this step, as this determines what [climate](#) changes relate to the problem. [Climate](#) changes can be labeled a [threat](#) or not, depending on the defined problem at hand. Identifying the [climate](#) threats that might [impact](#) the city or asset requires an understanding of local circumstances such as geography, past extreme events and local/regional [climate](#) projections. This information needs to be available to successfully finish this step.

Results

The outcome is a list of [climate](#) threats that could potentially affect the city or asset, including a description of local historical events (frequency and severity) and a first insight in future occurrences ([likelihood](#) and potential [impact](#)), resulting in a first indication of the [risk](#) of a [threat](#).

Guidance on performing this aspect


RESIN e-Guide

Support for uniform process

- Use of projects: Multiple users

Edit project.

Edit the details of the Adaptation Plan


Name
test project Resilient cities 


Description
test project Resilient cities


Visibile


Only you


Share with others

Albert Nieuwenhuijs - TNO 

Peter Bosch - TNO 

Tara Geerdink - TNO 

Vera Rovers - TNO 



EDIT **CANCEL**

RESIN e-Guide

Support for uniform process

- Use of projects: Store information

The screenshot displays the RESIN e-Guide web application interface. The main content area is titled "Decision framework" and contains a grid of steps: "Assess Climate Risk", "Develop Adaptation", and "Prioritise Adaptation Options". Below this, there are sub-sections for "Scoping", "Awareness", "Role definition", "Risk", "Goal definition", and "Baseline". A note is visible at the bottom of the framework section: "It is suggested to complete ASPECT.1.1.1 before".

On the right side, there is a "Notes & Files" panel. It features a "CREATE NEW NOTE" button and a list of notes. A specific note is highlighted with a blue border:

Note 1 • 2018-04-25 11:56

Did a calculation for the number of tropical days expected for 2050. Report is attached

[KEA-180425115524.pdf](#)

A larger, magnified view of this note is shown in the foreground, providing a clearer look at the text and the attached file link.

RESIN e-Guide

Support for uniform process

- Use of projects: Status overview

Details

Project name: test project Resilient cities

Created: 20/04/2018

Team members: Albert Nieuwenhuijs, Peter Bosch, Tara Geerdink, Vera Rovers

Completed:

Phase 1

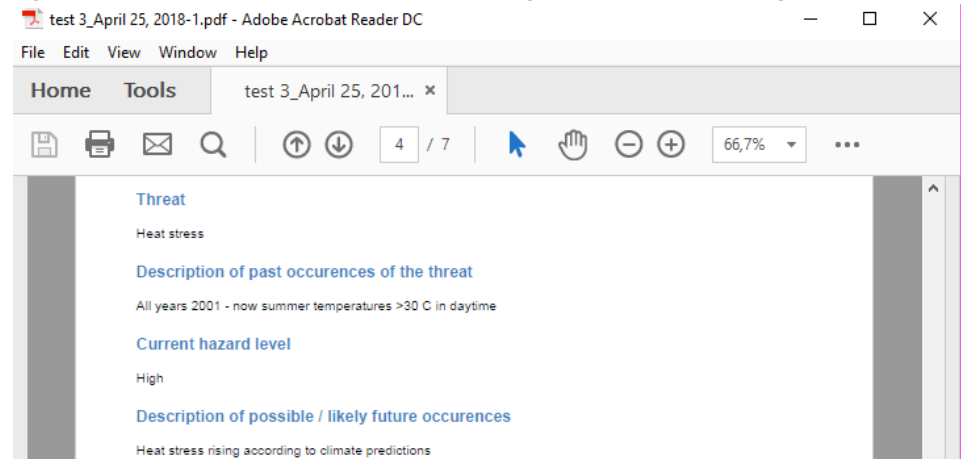
Step 1.1	←	completed
Step 1.2	←	started
Step 1.3	←	not started yet
Step 1.4		
Step 1.5		
Step 1.6		
Step 1.7		
Step 1.8		

OK

RESIN e-Guide

Support for uniform process

- Use of projects: complete status report in pdf



Did a calculation for the number of tropical days expected for 2050. Report is attached

KEA-180425115524.pdf:

dev.itti.com.pl/api/anonymous/attachments/c691847d-053b-44d1-be29-69f26a9850fa

Direct link

ASPECT_1_1_2

Did a calculation for the number of tropical days expected for 2050. Report is attached

KEA-180425115524.pdf:

dev.itti.com.pl/api/anonymous/attachments/c691847d-053b-44d1-be29-69f26a9850fa

1.1.3. Aspect 1.1.3

RESIN e-Guide

Support for uniform outcomes

- Overview available methods and tools, both RESIN and external, when to apply, where to apply
- In each step, we provide general guidance how to perform the step and what tools might be suited to what situations (including heads-up for consequences down the line)
- Also each step, list of existing and new (RESIN) available tools **and concrete instructions how to use them to get relevant and good results for finishing the step**
- Forms for each step provide details and uniform structure to answers independently use used tools
- Use of uniform framework / terminology

RESIN e-Guide

Support for uniform outcomes

- Overview of tools
 - Categorised in topics
 - Indexed on practical indicators
 - Short textual remarks with practical pointers
 - Complete description of tool or method

Overview of RESIN and external tools that can be used beneficially in urban [climate adaptation](#) planning:

Climate drivers, climate threats, exposure							
	Method or tool	Free to use	Suited for beginner	Thorough	Quick	Autonomous use	Remarks
	3Di	T		X			Only covers water management
	Climate Impact Atlas	T	X	X	X	X	Only covers area of the Netherlands, Dutch language only
	LCLIP (Local Climate Impacts Profile)	T	X	X	X		Systematic step-by-step method to assess exposure to weather conditions. Primarily aimed at the organisation level (not complete cities). Supported by Excel tool to gather and assess results.
	RESIN Climate Risk Typology	T	X		X	X	Quick tool that produces indicators that are relevant for determining climate threats, drivers, stressors and risks, based on available statistics of your NUTS-3 region.
	RAMSES Urban climate projections and climate impact detection	M	X	X		X	The method is intended to carry out a first assessment and lay the groundwork to keep track of the effects of climate change . Thorough for a first assessment.
	CLIMADA Natural catastrophe damage model	T	X	X			Is limited to storm, earthquake, meteorite, volcano and flood hazards. Runs in MATLAB or GNU OCTAVE. Expert support required for practical use.
	Risk Zone Map	T	X	X	X	X	Only covers flooding due to sea level rise
	Blue Green Dream	T	X	X	X		Supports the modelling and calculation of water management situations before and after adaptation measures have been taken.
Vulnerability, Impact, Risk							
	Method or tool	Free to use	Suited for beginner	Thorough	Quick	Autonomous use	Remarks
							Extensive systemic guideline describing all steps to perform a qualitative and quantitative Risk-based Vulnerability Assessment . Based on the German

RESIN e-Guide

Support for uniform outcomes

- Concrete instruction when and how to use tool for any step in process



[HOME](#) / [ASSESS CLIMATE RISK](#) / [SCOPING](#) / [CLIMATE THREAT](#)

Climate Threat .

Goal of this aspect

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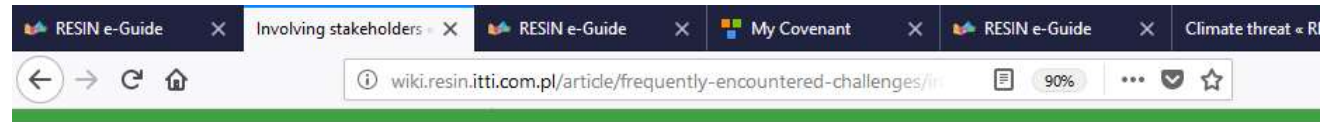
- [heat stress](#) / heat waves,
- [pluvial flooding](#),

RESIN e-Guide

Support for uniform outcomes

- Consistent framework of terms

- Definition appears when hovering over term in text



HOME / FREQUENTLY ENCOUNTERED CHALLENGES / INVOLVING STAKEHOLDERS

Involving Stakeholders.

Edit

Why stakeholder involvement in climate adaptation?

[Climate](#) and [resilience](#) literature indicates that adequate [stakeholder](#) involvement is essential for the development and implementation of [adaptation strategies](#)¹⁾²⁾³⁾. [Adaptation strategies](#) require actions that, for the short-medium term and for longer, provide valuable contributions in [risk](#) reduction. Such strategy development can be seen as a complex and ambiguous [risk](#) management process, than can only be carried out effectively in close consultation of and collaboration with the stakeholders involved. Developing a strategy and implementing a plan to cope with such a complex challenge has a higher chance of success if [stakeholders](#) account all interests and involving all relevant stakeholders.

Person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or activity

Note: A decision maker can be a stakeholder.

Why is it a key challenge?

Planning for successful [climate change adaptation strategies](#) requires involvement of many different stakeholders. There are many different stakeholders, and even more persons involved with different interests, perspectives, disciplines, knowledge and experiences. Furthermore, collaboration between the stakeholders (public and private) with different interests and responsibilities is needed. The involvement of stakeholders in the [climate adaptation](#) planning process is experienced by many European cities as one of the key challenges in [climate adaptation](#), such as the cities of [Paris](#), [Bratislava](#), [Manchester](#), [Bilbao](#) and [Almada](#). The question is who to involve, when to involve and how to do this?

RESIN e-Guide

Support for uniform outcomes

- Guidance in required information by use forms

The screenshot displays the RESIN e-Guide interface. At the top left is the RESIN logo with the tagline 'SUPPORTING DECISION-MAKING FOR RESILIENT CITIES'. The navigation menu includes 'HOME', 'ABOUT RESIN', 'TUTORIAL', 'LEARNING CENTRE', 'DECISION SUPPORT CENTRE' (which is highlighted), 'BLOG', and a user profile icon. The main content area is titled 'Decision framework' and features a grid of green buttons representing different stages and aspects of the framework. The 'Assess Climate Risk' stage is highlighted, and within it, the 'Climate threat' aspect is selected. Below the grid, a blue link suggests completing 'ASPECT_1_1_1' before proceeding. The interface also includes icons for 'NOTES &' and 'ASP'. On the right side, there is a 'Notes &' sidebar with a 'CREATE NEW NOTE' button and a note titled 'Note 1 - 2018-04' with a link to a report.

RESIN
SUPPORTING DECISION-MAKING FOR RESILIENT CITIES

HOME ABOUT RESIN TUTORIAL LEARNING CENTRE DECISION SUPPORT CENTRE BLOG

Decision framework

Assess Climate Risk	Develop Adaptation Approaches	Prioritise Adaptation Options	Develop Implementation Plan				
Scoping	Awareness	Role definition	Risk assessment	Goal definition	Baseline	Commitment	Communication
Problem definition	Climate threat	Non-climate related trends	Stakeholders	Time horizon	Context	To be deleted	

[It is suggested to complete ASPECT_1_1_1 before](#)

NOTES & ASP

Last edited by Albert Nieuwenhuijs on 25.04.2018

Climate threat

1.

Threat

Heat stress

Description of past occurrences of the threat:

All years 2001 - now summer temperatures > 30 C in daytime

Notes &

CREATE NEW NOTE

Note 1 - 2018-04

Did a calculation or 2050. Report

[WFA-180425T](#)

RESIN e-Guide

relation to existing platforms

- Results lined up with UAST and Mayors Adapt reporting tool
- Looking for possibilities for further integration of our solutions on existing platforms (Climate adapt, Mayors adapt)

Questions?



Visit the e-Guide at <http://e-guide.resin.itti.com.pl/>