

INDIVIDUAL GANTT CHART

PROJECT MANAGER	Mrs Roxane Bandini-Maeder
COMPANY NAME	Geoneon c/o Enterprize, Hobart, Tasmania 7000, Australia
COUNTRY OF DEPLOYMENT	BHUTAN
THEMATRIC AREA	Resilient infrastructure
DATE	Dec 20 2021- Jul 31 2022

TASK ID	Milestones (With Each Monthly Deliverable) TITLE	Person Responsible	START DATE	DUE DATE	Task Status	Timeline (December to July)																											
						December (W1-W4)	January (W1-W4)	February (W1-W4)	March (W1-W4)	April (W1-W4)	May (W1-W4)	June (W1-W4)	July (W1-W4)																				
1	Multi-hazard vulnerability model					[Gantt bars for task 1]																											
1.1	Source satellite data		3-Jan	10-Jan		[Gantt bar for 1.1]																											
1.2	Pre-processing		7-Jan	17-Jan		[Gantt bar for 1.2]																											
1.3	Infrastructure segmentation deep learning model training		12-Jan	21-Feb		[Gantt bar for 1.3]																											
1.4	Post processing		14-Feb	28-Feb		[Gantt bar for 1.4]																											
1.5	Develop Infrastructure model		21-Feb	28-Mar		[Gantt bar for 1.5]																											
1.6	Develop vulnerability model		1-Apr	31-Jul		[Gantt bar for 1.6]																											
2	Susceptibility Maps		1-Jan	31-Jul		[Gantt bar for 2]																											
2.1	Preliminary literature and input data review		3-Jan	10-Jan		[Gantt bar for 2.1]																											
2.2	Rockfall source area detection		3-Jan	17-Jan		[Gantt bar for 2.2]																											
2.3	Rockfall runoff simulation and runoff fees		24-Jan	21-Feb		[Gantt bar for 2.3]																											
2.4	Debris flows source area detection		14-Feb	28-Feb		[Gantt bar for 2.4]																											
2.5	Debris flows runouts simulation and runoff fees		28-Feb	11-Apr		[Gantt bar for 2.5]																											
2.6	Debris flows runouts simulation and runoff fees		21-Feb	7-Mar		[Gantt bar for 2.6]																											
2.7	Landslide inventory		28-Feb	11-Apr		[Gantt bar for 2.7]																											
2.8	Dynamic Flood Elevation Assessment		1-Feb	14-Mar		[Gantt bar for 2.8]																											
2.8	Dynamic Flood Reach Area Simulation		7-Mar	11-Apr		[Gantt bar for 2.8]																											
2.9	Final map combination		1-Apr	31-May		[Gantt bar for 2.9]																											

<p>Deliverables (For All Months)</p> <ol style="list-style-type: none"> Report on Satellite data covering the pilot area of interest Infrastructure model in a QGIS Project Rockfall, debris & dynamic flood susceptibility maps, & landslide inventory map in a QGIS Project Infrastructure exposure & vulnerability map in a QGIS project & technical report summarizing methodology <p>The key milestones are as follows:</p> <ol style="list-style-type: none"> Output 1: Delivery of satellite data covering the pilot area of interest JAN Output 2: Delivery of infrastructure model in a QGIS Project MARCH Output 3: Delivery of rockfall, debris flow and dynamic flood susceptibility maps, and landslide inventory map in a QGIS Project MAY Output 4: Delivery of infrastructure exposure and vulnerability map in a QGIS project and a technical report summarizing methodology, results, and recommendations JULY <p>The intended key project outcomes are;</p> <ol style="list-style-type: none"> Use of the product to make decision about climatic risk reduction Pilot-Project lead to on-going collaboration 	<p>Dissemination & Information Sharing Output</p> <table border="1"> <thead> <tr> <th>Knowledge</th> <th>Timeframe</th> </tr> </thead> <tbody> <tr> <td>Satellite imagery covering the pilot area of interest – Geo-Tiff</td> <td>End of January</td> </tr> <tr> <td>Infrastructure Segmentation and model: Buildings – GIS vector (shapefile) Roads – GIS Vector (shapefile) Tree Canopy – Geo-Tiff Infrastructure model – Geo-Tiff All will be delivered as an individual vector raster and in a Geoproject.</td> <td>End of March</td> </tr> <tr> <td>Hazard Susceptibility Rockfall Fall model – Geo-Tiff Debris Flow model – Geo-Tiff Landslide inventory – Geo-Tiff Dynamic Flood - Geo-Tiff</td> <td>End of May</td> </tr> <tr> <td>Vulnerability Model Technical Report including: Methodology – PDF document Findings – PDF Document</td> <td>End of July</td> </tr> </tbody> </table>	Knowledge	Timeframe	Satellite imagery covering the pilot area of interest – Geo-Tiff	End of January	Infrastructure Segmentation and model: Buildings – GIS vector (shapefile) Roads – GIS Vector (shapefile) Tree Canopy – Geo-Tiff Infrastructure model – Geo-Tiff All will be delivered as an individual vector raster and in a Geoproject.	End of March	Hazard Susceptibility Rockfall Fall model – Geo-Tiff Debris Flow model – Geo-Tiff Landslide inventory – Geo-Tiff Dynamic Flood - Geo-Tiff	End of May	Vulnerability Model Technical Report including: Methodology – PDF document Findings – PDF Document	End of July
Knowledge	Timeframe										
Satellite imagery covering the pilot area of interest – Geo-Tiff	End of January										
Infrastructure Segmentation and model: Buildings – GIS vector (shapefile) Roads – GIS Vector (shapefile) Tree Canopy – Geo-Tiff Infrastructure model – Geo-Tiff All will be delivered as an individual vector raster and in a Geoproject.	End of March										
Hazard Susceptibility Rockfall Fall model – Geo-Tiff Debris Flow model – Geo-Tiff Landslide inventory – Geo-Tiff Dynamic Flood - Geo-Tiff	End of May										
Vulnerability Model Technical Report including: Methodology – PDF document Findings – PDF Document	End of July										