

# 2 - Resources & Pitch Update

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## Assesment

### Purpose

Your network concept should become **practically feasible**.

To achieve this, identify the **data, methods, infrastructure, and validation steps** required — including **gaps and how to resolve them**.

### 1) Topic & Goal (1–2 Sentences)

State: - The **focus** of your network design (planning logic, sub-area, or process emphasis). - What you aim to achieve with **20 stations**.

*Example:*

“We design a physiographically stratified precipitation network for the northern Burgwald, aiming to represent elevation and canopy gradients while maintaining operational feasibility with 14–18 permanent stations.”

### 2) Resource Plan (Required)

Fill out the following table in Markdown:

		Access Status		Valida- tion			
Resource / Dataset / Tool	Source (Link / DOI)	Spatial / Temporal Resolu- tion & Format	(available / open / request / uncer- tain)	Process- ing / Method Needed	Anchor (Double / Open- ing / Method Needed)	Gap / Risk (permits, cost, reli- ability)	Mitiga- tion / Next Step

		Access	Validation					
		Status	Anchor	Gap /	Mitigation /			
Resource / Dataset / Tool	Source (Link / DOI)	Spatial / Temporal Resolution & Format	(available / open / request / uncer- tain)	Process- ing / Method	Open- Wood / Needed	(Double / Risk Open- Wood / P-Q)	(permits, cost, reli- ability)	Next Step

*Goal:* make visible what is **available**, what is **missing**, and how you will **obtain or substitute** missing items.

### 3) Method Components (max. 1 Page, Bullet Points)

Choose **2–3 core methods**. For each method, describe:

- **Purpose** (what question does it answer?)
- **Required Inputs** (refer to Resource Plan)
- **Output / Metric** (e.g., hot-spot map, bias estimate, number of P–Q pairs)
- **Minimal Workflow** (1–4 steps)

*Example (short form):* - **Radar–Gauge Merge (Bias Correction)** - Inputs: DWD RADOLAN RW, open-field reference gauge - Output: corrected 5–60 min rainfall fields - Steps: Align grids → compute residuals → apply correction factor → validate via double-station

### 4) Minimal Workflow (6–10 Numbered Steps)

Describe your *implementation pipeline*, from data to final pitch.

*Example:* 1. Collect DEM + forest structure + baseline gauges 2. Identify physiographic strata (slope / aspect / canopy) 3. Generate candidate station zones 4. Assign roles (Backbone / Infill / P–Q / Open–Wood / Reference / Event–Scout) 5. Prioritize stations A/B 6. Define three validation anchors 7. Produce map + station table 8. Check feasibility (access, power, telemetry) 9. Prepare pitch slide + justification paragraph

## 5) Literature (3–5 Sources + One Justification Paragraph)

- Use **primary sources** (peer-reviewed papers, technical reports, observatory design descriptions).
- Include DOI or direct link.
- Write **one paragraph** explaining how these sources **support your resource & method decisions**.

*Example (structure):* > We include an open-field vs. forest-understory measurement pair because Findus & Petterson (1998, DOI: 10.1029/98WR01336) demonstrate that interception losses vary strongly with LAI in humid, temperate forests comparable to the Burgwald. This supports the choice of at least one Open-Wood validation anchor and guides expected signal magnitude.

## 6) Pitch Update (1 Page, PDF)

Your pitch page must include: - **Map or diagram** of your station network - **Station list** ( **20** ) with **role** (Backbone / Infill / Event-Scout / Reference / P–Q) and **priority** (A = essential, B = optional) - **Three evaluation metrics**, e.g.: - Physiographic coverage - Variance / uncertainty reduction - Number of functional P–Q pairs - Interception contrast (Open-Wood) - Accessibility / maintenance feasibility

Also include **1–2 sentences linking back to the Resource Plan** showing feasibility and known limitations.

## Submission Format

Submit one document containing: - **Sections 1–5** - Plus a PDF\*\* for the **Pitch Update (Section 6)**