

Procurement Issue! Flooding – Climate Change?

An issue to discuss thoroughly.

The Triangle of the three sensitive interdependencies
to **"control / influence / affect" the INVESTMENT amount:**

- (1) **Technical** prescribed **Flooding** Criteria allows the Contractor to evaluate his adequate preventive precautions in his financial bid.
- (2) The **economic effect** due to depict adequate low, medium or high **thresholds** of flooding criteria to identify the financial requirements for the measures, to consider it in the **"Contract Price" generally** or in **"Bill No 100", Preliminary and General Costs, in particular**, if a BoQ-item is designated.
- (3) Find the **balance of "risk-sharing"** of the appropriate threshold value of the "event", to give the Contractor assessable data, in order to reduce huge **speculate costs** (i) "responsible" Contractors are in disadvantage against (ii) bid **gamblers**, which ones, will not consider the "unexpected" risks with 7% up to 13% of the Contract Price.
- (4) The **insurance risks** for loss and damage might be limited to the insurer, and hence the insurance coverage, premiums are on the low side, causing lower handed outs of provisions/commissions and might even **avoid disputes**.

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- A _ How do you define **Flooding criterion**?
 - B _ Which criteria are suitable to **characterize the "cause-effect"**
i.e. catchment area, **IDF-Curve** for precipitation, snowfall, and **discharge**
intensity with velocities / energy levels in **streams / rivers**.
 - C _ Which **"***SMART"** Indicators would match the purpose best, to identify the **cause** of the flooding with the reasonable **threshold value**
C1 ... **below** threshold = Contractor's Risk Event (CRE) and
C2 ... above threshold = the Employers Risk Event (ERE) SC17.3
 - D - An appropriate **"risk-sharing" of flooding criteria** considering the **Insurance package** with its premiums, loss and damage amount, **deductibles**, and handouts/commissions, will help to bring down the Bid Price of Contractors due to less **risk allocation** and avoid even **disputes**.

*****SMART**

- S specific feature
- M measurable
- A accessible
- R relevant / essential data
- T time bound

This is not a Climate Change circumstances ...

Facebook: > <https://www.facebook.com/watch?v=329092222608354>

Who is responsible for the loss and damage caused by the Flooding?

>>> Employer, >>> Employer's Personnel / Engineer or >>> Contractor?

Starting Point : SC17.3 Employer's Risks (h)

Excerpt: SC17.3 (h) any operation of *forces of nature*, which is unforeseeable OR against which an experienced contractor could *not reasonably have been expected* to have taken adequate preventive precautions.

A _ **Employer's Responsibility**

to provide IDF-Curves (intensity, duration and frequency) of the catchment areas / Flooding definitions about "unpredicted snowfall, melting, and precipitations" over several years, impacts of construction activities upstream due to narrowing cross-sections of the stream (Bernoulli formula, speed, energy) **outside of the Contractor's construction SITE**,

B _ **Engineer's Supervision**

to observe the requirements of the Contractor's obligations + operations & to execute the own assigned task subject to Service Contract?

C _ **Contractor's preventive precautions** (low, medium, high level)

"within the range" of predictable / unforeseeable flooding as defined in the Tender Dossier OR common easily accessible data, e.g. published in the governmental statistic bureaus. The Contractor has apparently done some **preventive precautions** (if adequate for flooding definition) than he has to follow the procedural rules of SC17.4 [Consequences of Employer's Risks]



Claim Notice + Claim Request SC20.1, reasons SC17.3 + Clause 19

How would you assess a Claim caused by SC17.3 and Clause 19 [Force Majeure]

A _ Flooding **thresholds** are **not** defined?

B _ Flooding thresholds are **defined** in the Conditions of Contract / **PCC** – Contract Data, Method of Measurement Book, and provide a **BoQ100-item** under Preliminary and General provisions?

C _ Do you think the **insurance** will recover some loss, if the claim is submitted within due course?

Please respond to Emma@ppe61.de

www.ppe61.de/17.3+Flooding.pdf + www.ppe61.de/05.5+Procurement-Flooding.pdf