

IFIB:

**IFIB-ACT-SACT-18-75 Pilot Study:
Improving Strategic Foresight Analysis
(SFA) Using Data Science Tools and
Techniques, Automation and Software
Support to Analyst**

Reference:

Q & A # 4

Date of Issue:

8 Jan 2019

The following questions were raised with respect to subject IFIB. Responses are to provide clarification.

Questions	Responses
1. Any specific application hosting environment requirements? Is AWS public sector okay? Load requirements?	Any cloud computing platforms could be used for data storage and computing purposes.
2. Any specific technical requirements? Linux Distro, DB Engine, Dev Lang(s)	No
3. Any specific UI accessibility requirements such as screen readers, low vision, etc.?	No
4. Any specific usability or localization requirements such as multiple languages, date/time conversions and formats, etc.	The tool (deliverable 1) UI is to be provided in English and is to use a clear date/time convention recognizable to users in the US and Europe. There is no requirement for user customization of the UI to account for localization.
5. Any technical functional requirements that are not in the bid, single sign on, compatibility with out of date web browsers, etc.?	As a pilot project, the focus is on proof of concept of applying data science tools and techniques to Strategic Foresight analysis. The intention is not to produce production-level software. The use of the agile approach to development allows ACT and the Contractor to work together to identify and prioritize requirements. As such some features (such as single/sign on/off) may be identified as desirable (and this is also a function of the specific solution) and others will have no bearing on the pilot objectives (such as compatibility with web browsers beyond those being used by the immediate users). ACT uses the following browsers (and versions): X, Y, Z.
6. Do we need to do user management?	Yes. Contractor will provide account management for up to 20 NATO users, with individual usernames and passwords.
7. Who purchases software licenses?	Contractor is responsible for any software licenses for the duration of the contract.
8. There are ML tools - like AWS Comprehend - where charges are by character counts, others by data volume, or even something as soft as by "topic". Is there a recommended way to bid	Any of these requirements will be determined based on contractor's solution.

items like these when the volume / quantities are unknown at this time?

9. How exactly are the outputs of the NLP components supposed to be used in the scenario development component?

It is the trending topic output (produced using NLP) that is expected to form the input of the scenario development. See [1] for a high-level description of trend analysis as a step in the process for developing scenarios and a case study for an advertising agency. For more in-depth example and wider discussion on scenario development methodology see [2]. It is part of the challenge to develop the detailed methodology for incorporating trend analysis derived from NLP into scenario development.

1. <https://sloanreview.mit.edu/article/scenario-planning-a-tool-for-strategic-thinking>
2. [Scenarios for the logistics services industry: A Delphi-based analysis for 2025](#), Von Der Gracht, Heiko A. ; Darkow, Inga-Lena, ISSN: 0925-5273 ; DOI: 10.1016/j.ijpe.2010.04.013, International Journal of Production Economics, 2010, Vol.127(1), pp.46-59

10. For evaluation criteria 1 (parsing), is NATO looking for parsing in the sense of extracting text from structured documents, or taking text and parsing into syntactic structures?

The parsing refers to extracting text from documents. This competency relates to the automated data ingest requirement for Deliverable 1 and properties of the expected sources (differing digital formats, data streams vs static documents, structured (e.g. HTML) and unstructured (e.g. pdf)).