1. Elaboration on Terms of the Funding Gap Questionnaire
   1. Main hypothesis of the business plan

The tab in the funding gap named ‘DT efforts’ describes precisely the different assumptions made in the Business Plan and demonstrates that DT’s assumptions are reasonable.

The business case described here will develop equipment that will be used for approximately 5 years after the FID before new investment will be needed. Therefore, the business case is limited to the period 2022-2031.

*Revenues*

DT’s funding gap reflects only the difference between the counterfactual scenario and the project as described. Since the project is a process innovation which is expected to yield European economic and technological benefits, there is no expected change in revenue from the point of view of DT.

*Variable costs*

Variable costs are estimated on current raw materials costs and central scenario for recipients and production costs taking into account the existing experience of processes and future complexity of O-RAN network.

*Terminal value*

The project has no expected terminal value since there is no expectation that the assets will generate cash flow after the project is terminated.

*Inflation*

All revenues and costs are not inflated and expressed on 2021 basis, idem WACC is without inflation impact.

*WACC*

DT is a privately-owned company. Therefore, there is no public WACC calculation. DT’s global WACC is difficult to calculate as there are numerous moving parts, however an internal team has estimated a WACC of 3.76. This is close to externally verified WACC’s such as that of professor [Dadamodar](https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/wacc.html)[[1]](#footnote-1) which has been updated in January of 2021 with a WACC of 3.2% for telecom services.

* 1. Necessity of state aid

According to point 28 of the IPCEI Communication, the aid must not subsidize the costs of a project that an undertaking would anyhow incur and must not compensate for the normal business risk of an economic activity.

In order to assess the activities grouped under the IPCEI on Microelectronics, DT built a business model considering the incremental efforts and the incremental returns.

DT Internal Rate of Return for the IPCEI on Microelectronics is negative % without State aid, in a nominal scenario based on conservative and reasonable assumptions[[2]](#footnote-2). Thus, it is clear that the State aid does not subsidize the costs of a project that DT would anyhow have carried out.

* 1. Proportionality of state aid
     1. Firm’s hurdle rate

According to point 30 of the IPCEI Communication, in the absence of an alternative project, the Commission will verify that the aid amount does not exceed the minimum necessary for the aided project to be sufficiently profitable, for example by making possible to achieve an IRR corresponding to the firm’s hurdle rate.

DT Internal Rate of Return for the project IPCEI taking into account a 2416 k€ State aid from Germany would be negative. This happens to be below the value of the company’s WACC20. Yet DT feels that this would be sufficient to motivate it to launch into this project for the common European interest. In other words, this project will not confer any extra profits to DT, quite the opposite, it represents a cost to DT.

* + 1. Project’s funding gap

According to point 31 of the IPCEI Communication, the maximum aid level will be determined with regard to the identified funding gap in relation to the eligible costs. The funding gap refers to the difference between the positive and negative cash flows over the lifetime of the investment, discounted to their current value on the basis of an appropriate discount factor reflecting the rate of return necessary for the beneficiary to carry out the project notably in view of the risks involved.

DT funding gap, calculated as the discounted difference between the positive and negative cash flows over the lifetime of the IPCEI on Microelectronics, amounts to -23400 k€ (with a discount rate of 3.76 % equal to the company’s WACC).

The State aid granted to DT, in the form of a direct grant amounting to 24 160 k€ nominal, has a post-tax Net Present Value of 21 850 k€. Thus, it is below the funding gap; the State aid does not risk being disproportionate to the project, in it is the amount required for DT to be willing to undertake this project.

* + 1. State aid intensity

The eligible costs to carry out the proposed activities are calculated only to the level necessary for achieving the project objectives. They consist in personnel costs (technicians, engineers and other supports mandatory for the project completion), materials costs and equipment costs the details of which are provided in section 1.8. For equipment, only the part of the cost depreciated during the period.

The total amount of eligible R&D and FID costs is 24 160 k€.

Thus, the required State aid is the maximum that can be legally attained with 100 % of the eligible costs set by the Community guidelines for IPCEI.

* + 1. State aid cumulation

In the light of the beneficiary's declarations and to the knowledge of the German authorities, DT does not receive any State aid other than that indicated in point 2.2 of this notification to finance its share of work under the IPCEI on Microelectronics.

This state aid may come from the state budget or local authorities as well as from the structural funds.

* + 1. Open selection proceeding

The selection of DT as a partner for the IPCEI on Microelectronics and as a beneficiary of public support in Germany was done in the context of an open call for manifestation on interest in September 2021, based on objective criteria which are neither discretionary nor discriminatory. Numerous companies applied, among which DT was selected. This contributes to reinforcing the proportionate nature of the State aid.

1. [Cost of Capital (nyu.edu)](https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/wacc.html) [↑](#footnote-ref-1)
2. [↑](#footnote-ref-2)