

# High inflation, impact on cost & budget

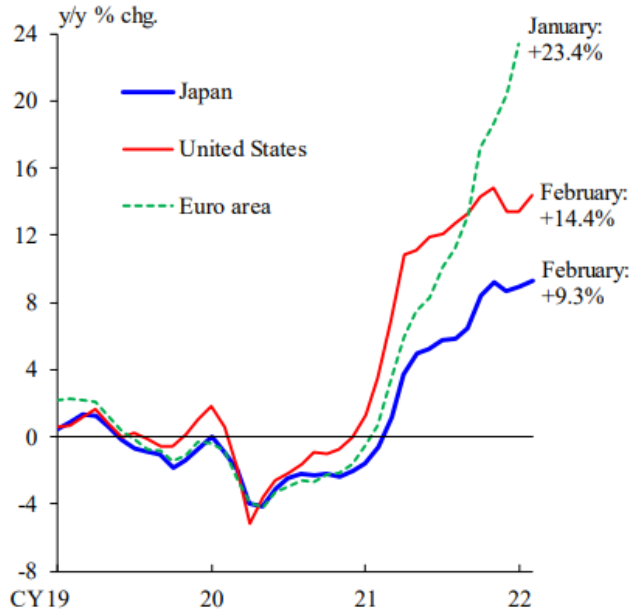
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ESTEC, The Netherlands - 16<sup>th</sup> September 2022

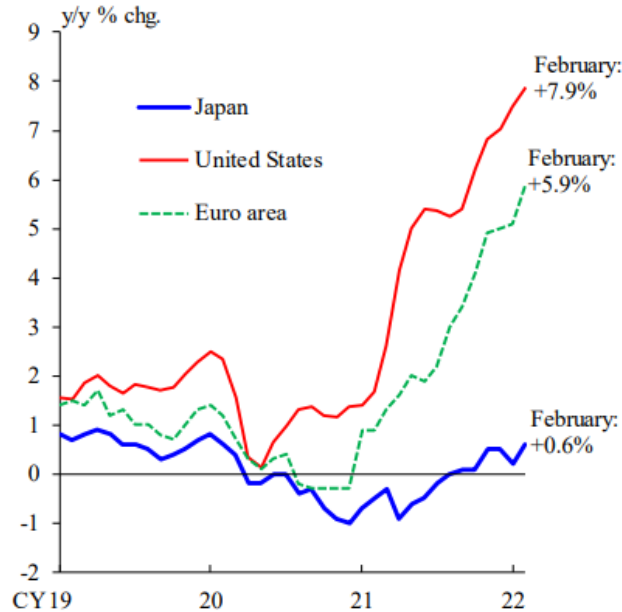
## Price Developments in Japan, the United States, and the Euro Area:

## Energy prices:

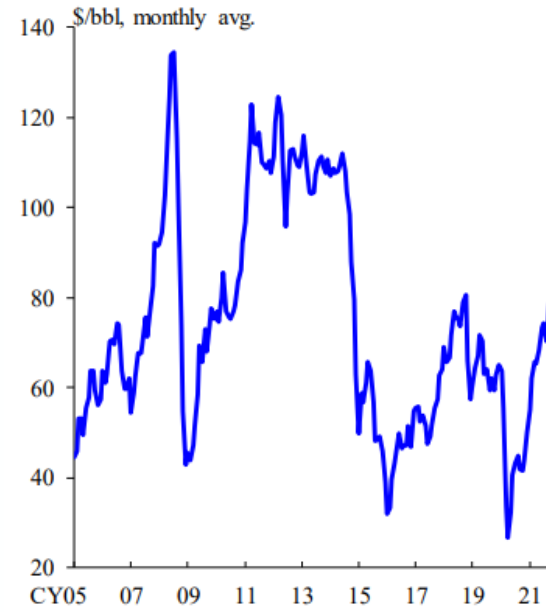
### Producer Prices



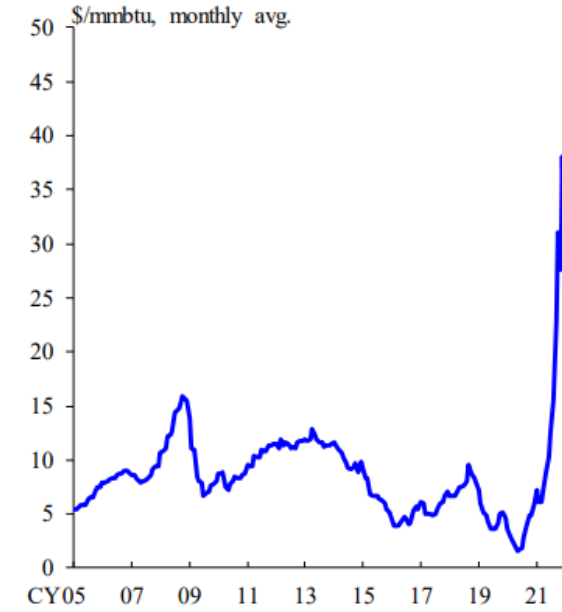
### Consumer Prices



### Crude Oil Prices (Brent)



### Natural Gas Prices (Europe)



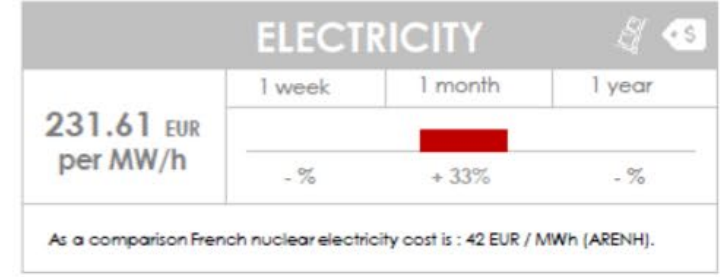
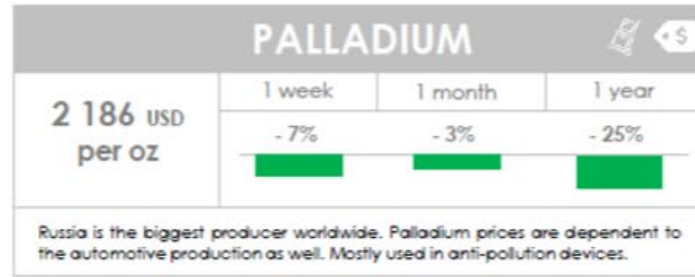
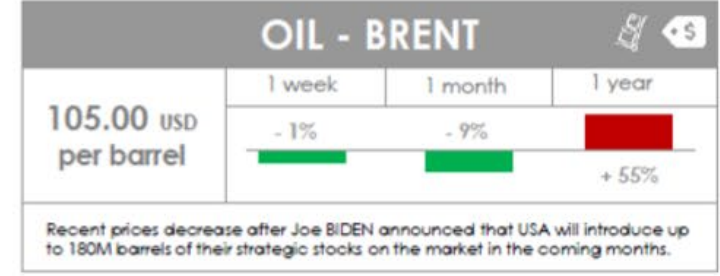
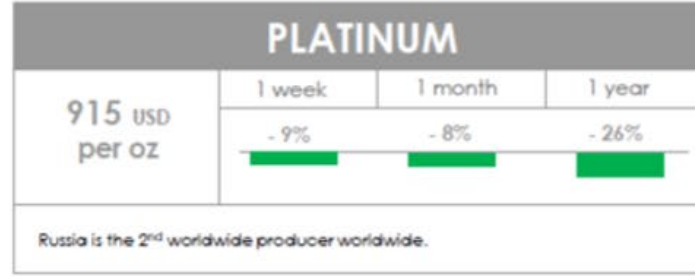
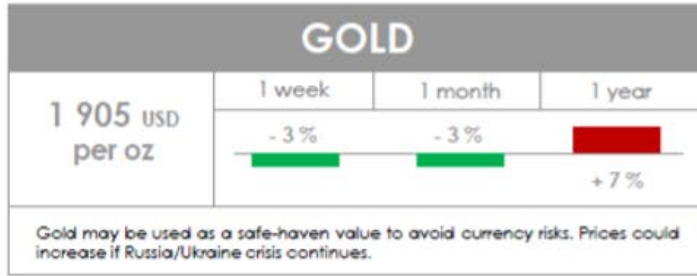
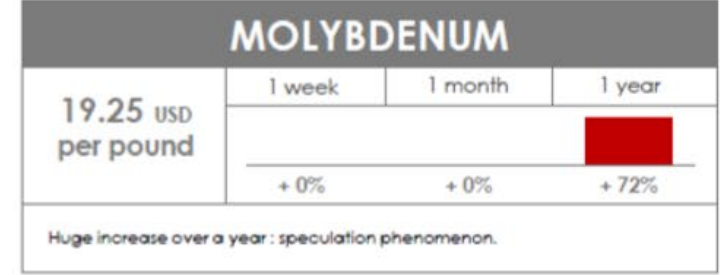
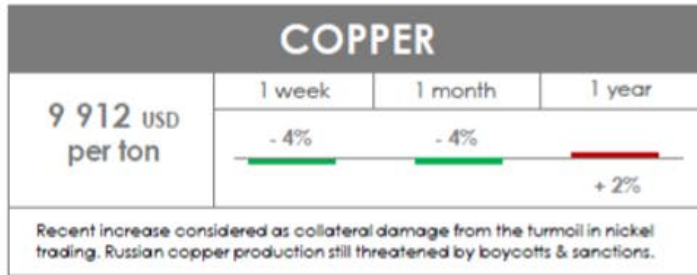
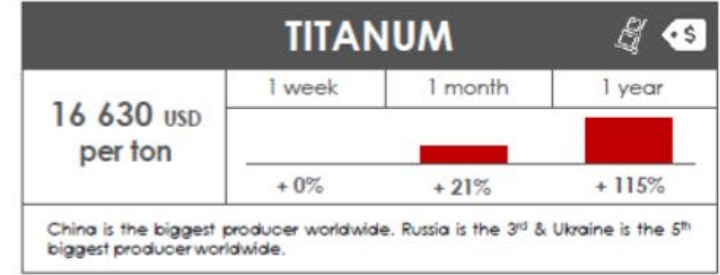
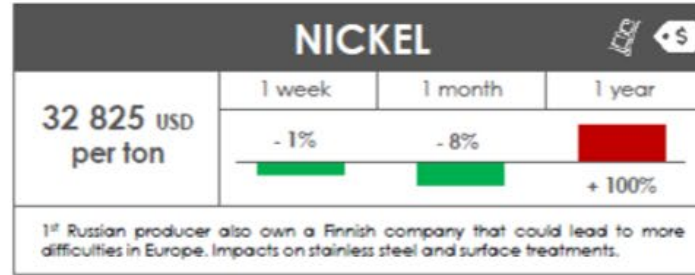
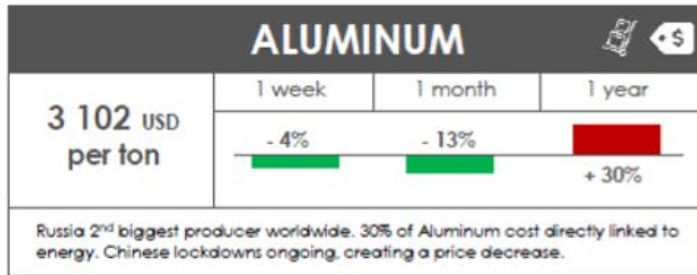
Sources: Bank of Japan; BLS; Eurostat; Haver; Ministry of Internal Affairs and Communications

Sources: Bloomberg; World Bank

## Main factors:

- Expansion in the aggregate demand;
- Decline in supply-chain capacity;
- Sectoral shift in demand;
- Surge in energy prices.

# Impact on material costs



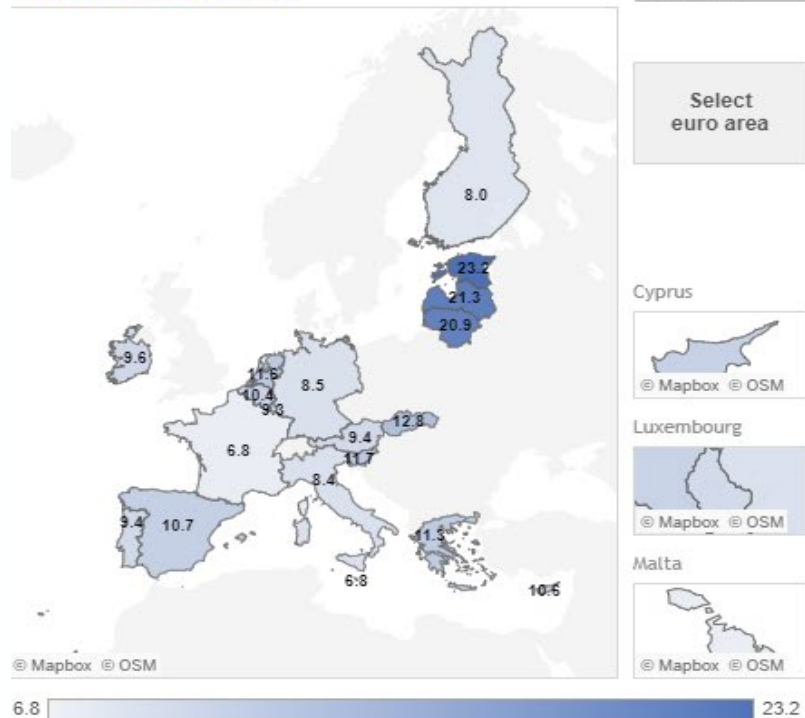
# Impact on inflation in Europe

## ECB August 2022:

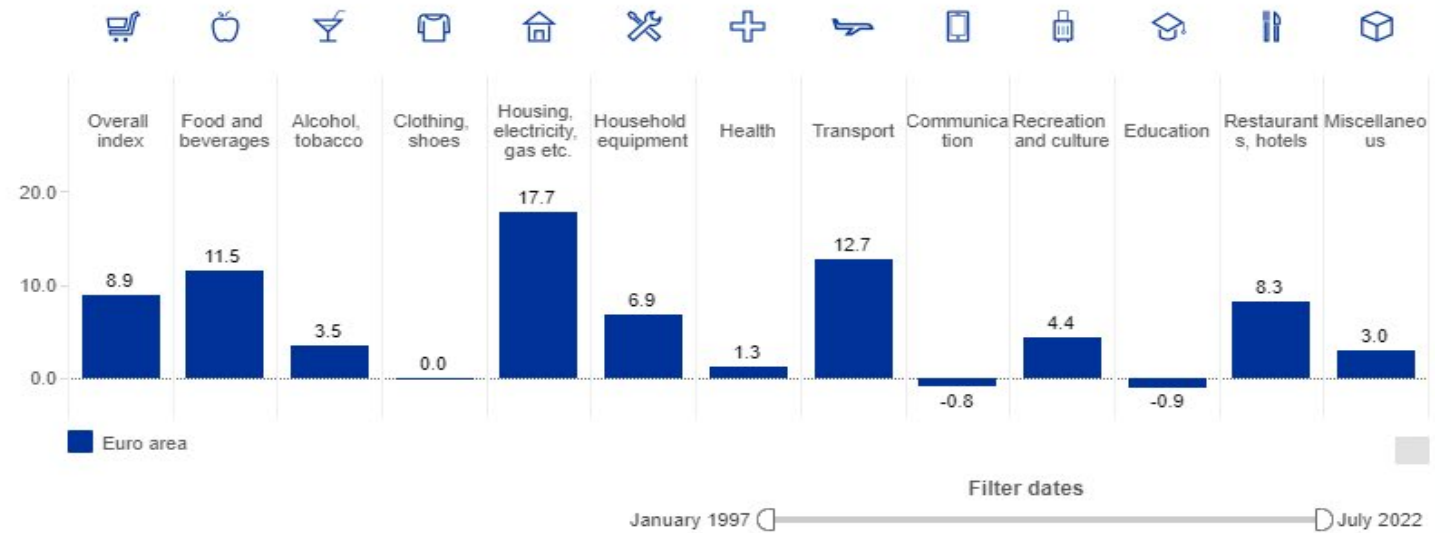
HICP inflation in the **euro area** increased to **8.9%** in **July 2022** compared to **8.6%** in June 2022

	Euro area	Highest Estonia
July 2022	<b>8.9</b>	<b>23.2</b>

### HICP inflation rate - Overall index July 2022, Euro area countries



### Overall and breakdown of HICP by components July 2022, Euro area



### HICP inflation rate - Overall index Euro area

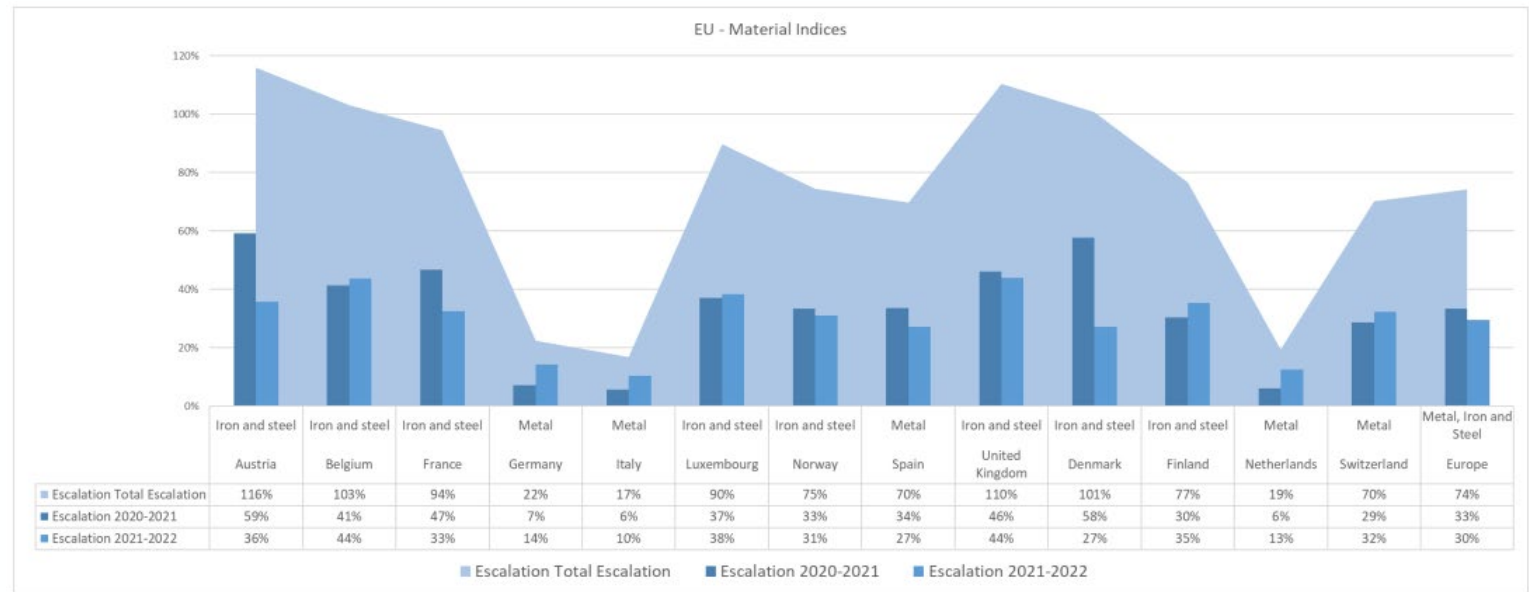
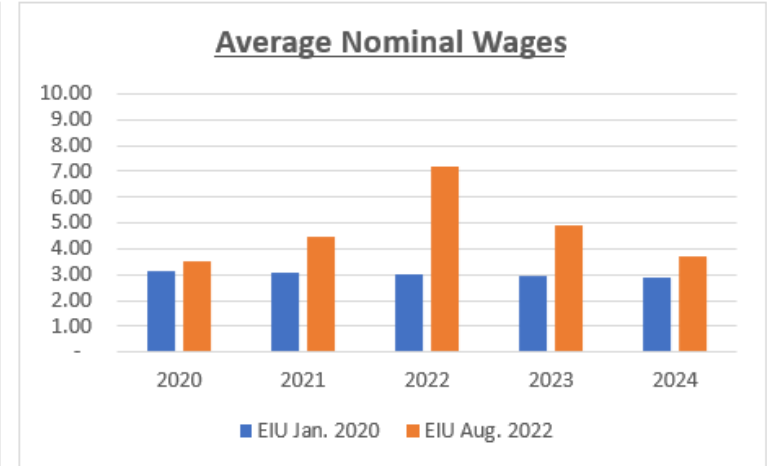
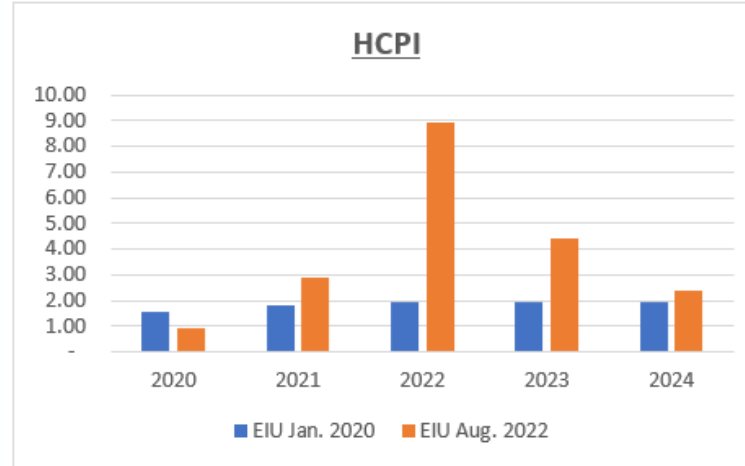


# Impact on inflation in Europe

## SOGETI 2021-2022:

Country	May 21 - May 22	Highest index	Nb indices
Austria	17%	80%	17
Germany	13%	71%	35
Belgium	23%	68%	10
France	27%	66%	18
Luxembourg	27%	61%	6
The Netherlands	7%	53%	22
Switzerland	25%	43%	4
Italy	6%	37%	21
Norway	18%	37%	8
Spain	9%	37%	18
Finland	13%	31%	7
Portugal	15%	24%	5
United Kingdom	12%	20%	6
Poland	15%	20%	2
Estonia	16%	19%	2
Denmark	10%	19%	3
Czech Republic	15%	18%	6
Greece	7%	14%	6
Slovenia	12%	13%	2
Romania	11%	11%	1
Ireland	7%	8%	4
Sweden	2%	7%	13
Hungary	5%	7%	2

## EIU 01.2020 vs 08.2022:



## Fixed Price with price Variation (FP+V):

A portion of the price is adjusted throughout the execution of the contract to reflect inflation, via a **price variation formula** (PVF).

→ **ESA** bears the risk related to inflation.

## Firm Fixed Price (FFP):

The inflation rate is anticipated at the moment of contract signature through a **financial provision for escalation**.

→ **Industry** bears the risk related to inflation.

Each contractual situation shall be considered on a **case-by-case basis** in their respective programmatic context (**project timeline, level of industrial commitment, affordability and level of flexibility** of the programmatic framework, etc...)

## Contracts under implementation:

The new economical context **does not constitute as such a reason to revisit contractual commitments** of Industry which shall remain binding on the relevant parties. Nevertheless, as always when facing particularly severe unforeseen challenges, the Executive will remain available to consider in good faith some contribution to particularly unsustainable hardship situation, at any level of contracting, provided that the (sub) contractor (s) will have demonstrated its proactive risk management and best effort to mitigate the impact on the performance of the projects. This Baseline approach will be followed in the context of large Project implementation

## New commitments:

**For large projects:** the Executive will consider more frequently the use of **Fixed Price with Variation (FPV)**, whether based on a classical escalation formula or EIU indices and/or FFP price adjustment clause. In its discussion with industry, the Executive will consider the specific circumstances of the relevant project ( e.g. administrative effort, economic reality, flexibility/indexation of ESA budget, etc.) in order to find the most equitable, efficient and affordable approach to the particular contract;

**For R&D and Co-funded contracts:** The Executive does **not intend to change the current FFP** (or Ceiling Price) approach since ESA Participating State (s) financing shall be considered as a fixed contribution.

## Boundary conditions:

### ➤ Affordability

- Mandatory activities under LoR as well as some other optional programmes are currently **not subject to indexation** and therefore the Executive is not in a position to take over or share the economic risk with industry;
- Although most Optional Programmes are escalated based on HICP, it is presently done **on basis of N-24 months**, which may not be sufficient to cover the inflation rate of 2022 (unless a significant decrease of inflation would be confirmed beyond 2022).

### ➤ Legal constraints

- EU Delegated Programmes **do not foresee any escalation** of the ESA budget and the applicable rules when the EU is the contracting authority do not allow for the flexibility available in ESA for mitigating or sharing the risk;
- Other Partnerships: the **financial constraints** of other Partners will need to be duly considered (Eumetsat, ESA member states having delegated the EU Recovery Fund space activities implementation to ESA such as Italy, Greece, Spain...)

### ➤ Administrative efforts

- When considering mitigation measures, the **administrative effort for ESA but also for industry**, has to be taken into account. In this respect, a systematic application of the price type “Fixed Price with Variation” down the contractual chain in ESA contracts would have such significant administrative drawback, considering the efforts to negotiate the relevant escalation formula for each contract as well as to review, verify and approve a very high number of escalation claims.



## Price type and other contractual tools:

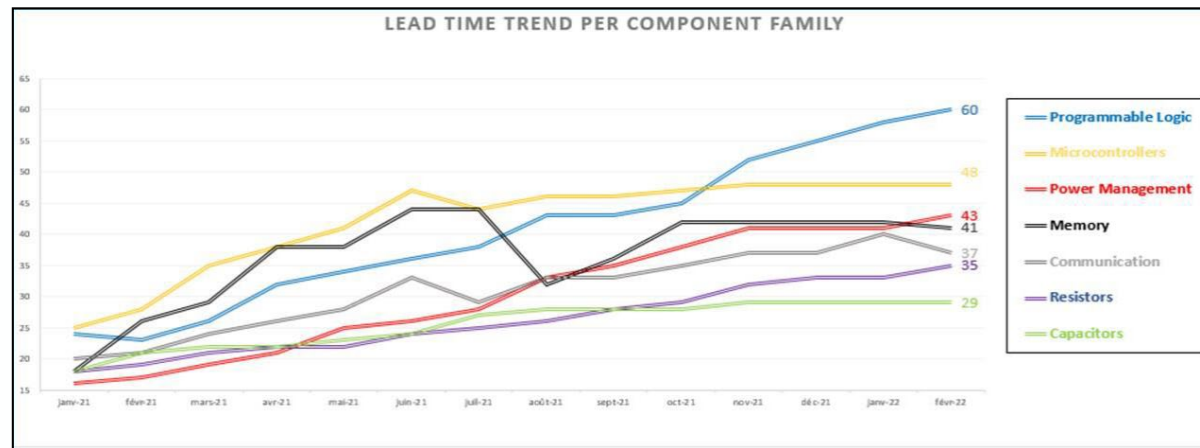
- Manpower contracts (Loan or Service)
- Co-funded contracts (ARTES, GSTP, InCubed, Navisp, Boost etc)
- Technology (fully funded) contracts
- Large contracts that are not co-funded

## Possible measures to address inflation:

- Adaptation of the Industrial rates
- Selection of Fixed Price with Price Variation
  - With a “classical” escalation formula based on dedicated (Labour/Material) Indices
  - Simplified based on EIU indices
- Maintaining the Firm Fixed price approach with
  - An adjustment clause (based on HICP evolution and/or dedicated to material costs for contracts where specific materials constitute a large share of the price)
  - Eligibility of economic risk as part of the Management Reserve
  - Exceptional hardship acknowledgement if the conditions are demonstrated.
- Escalation of Optional Programmes done on a basis of N-12 months or less (rather than the currently N-24 months) with possible extension of such indexation to industrial activities under the LoR.

## Scarcity of components:

- The scarcity of components shall be dealt with as part of the **risk register** and of the **Management Reserve** with adequate mitigating measures. This should be done for the whole supply chain as far as possible.
- The issue shall be outlined in the **tender conditions** for new projects.
- The financial aspects can be handled as mentioned above, in particular with the possible implementation of a **cost reimbursement element** for contracts with a large portion of material/component costs.



# Thank you for your attention!

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