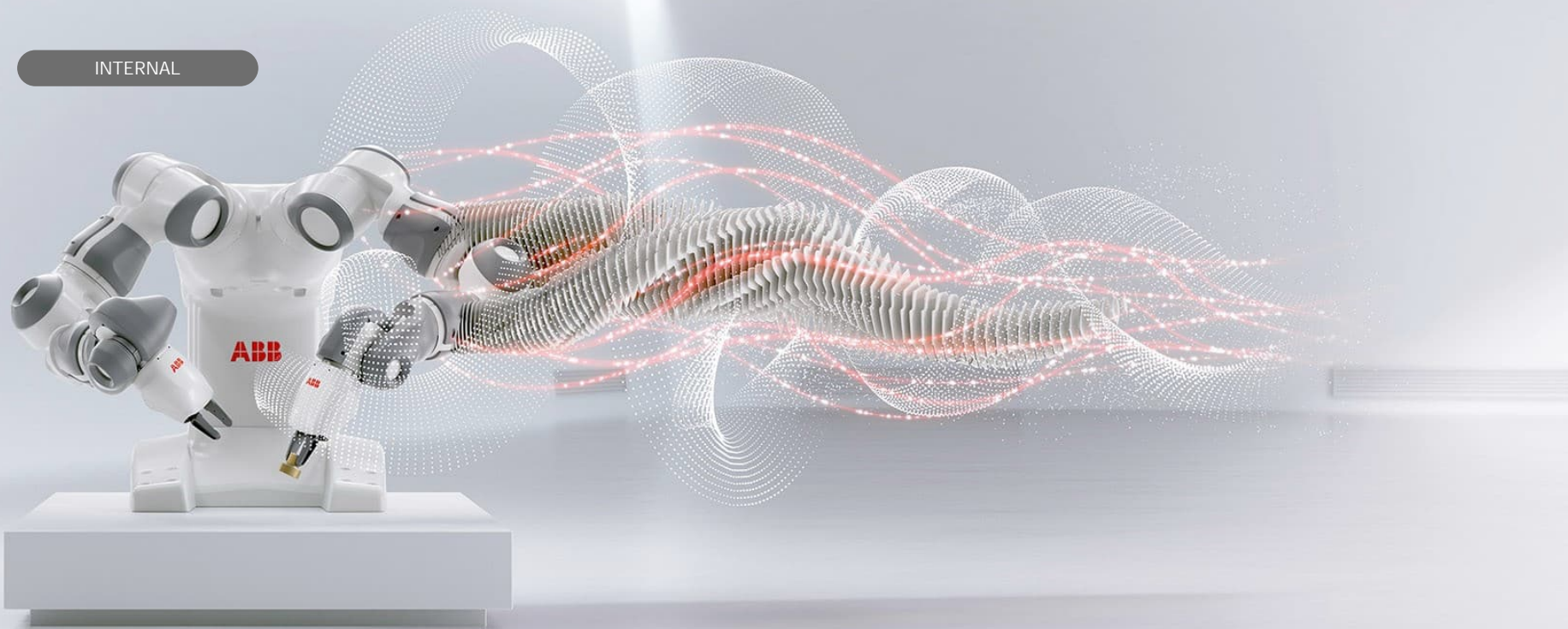


INTERNAL



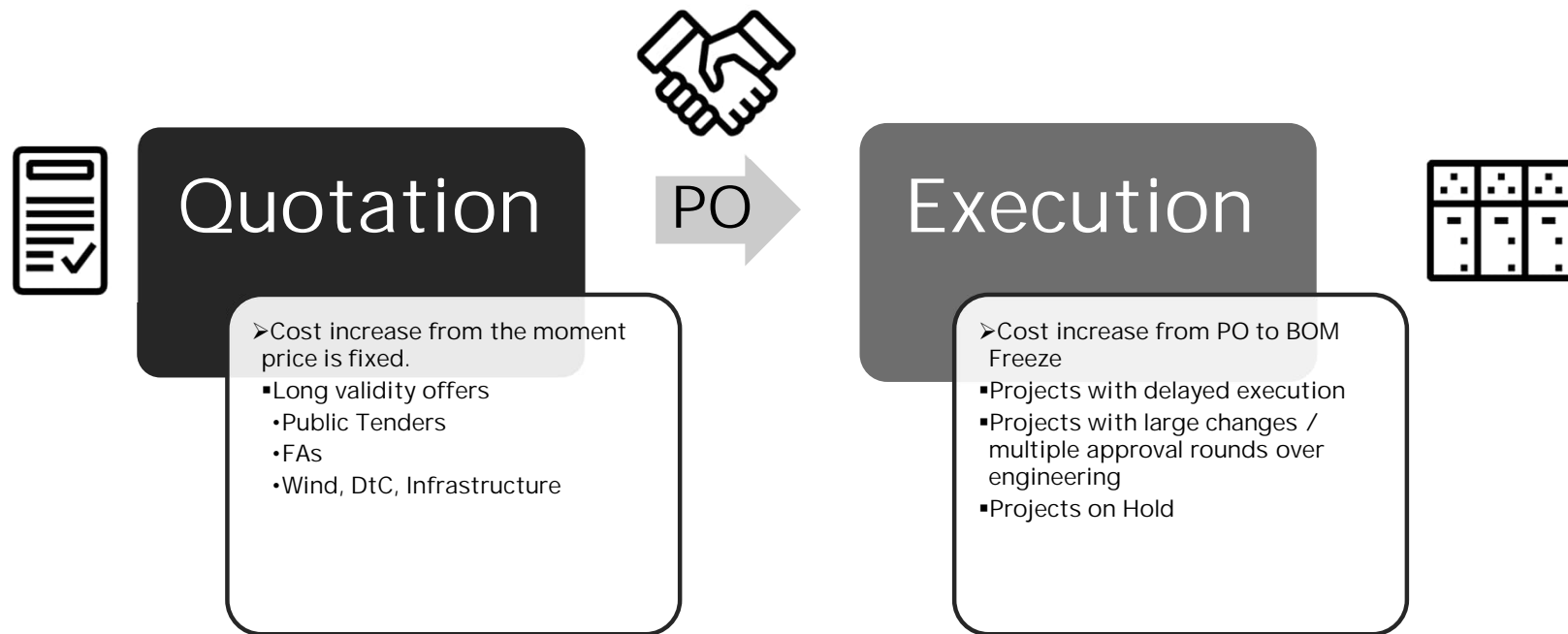
Cost Increase Risk Mitigation

Price Escalation & Inflation clauses based on PPI (Industrial Producer Price Index)



Cost Increase Risk Mitigation

Risks Identified

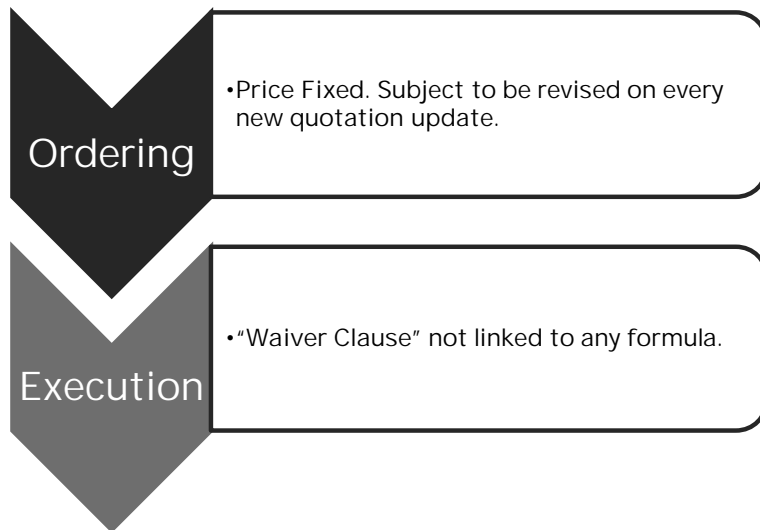


Cost Increase Risk Mitigation

Escalation Formulas Application – Quotation Stage

#1 Preferred Situation

- A. Quotation Validity 30 Days
- B. Open Clause for cost Increases



Waiver Clause:

If one or more costs should vary between the order date and the moment of delivery of each lot, the price will be changed to reflect the increase in said costs.

If the approval of drawings or other design documents is delayed beyond contractually agreed schedule and/or if substantial modifications are requested by the Purchaser during the design or manufacturing period over and above agreed specifications, ABB will reserve the right to adjust the price and delivery time accordingly

If dispatch is delayed due to lack of instruction by the Purchaser or any reason not attributable to ABB, ABB reserves the right to deliver the equipment to an internal/external warehouse, which will keep materials as depositary on behalf of the Purchaser. The equipment shall be considered as dispatched; all payments shall be due accordingly and costs for warehouse and following dispatch shall be borne by the Purchaser, plus an additional 15% of the actual cost as administration charges. The title of the Supply, and the related risks, shall pass to Purchaser from the day of delivery of the equipment to the internal/external warehouse

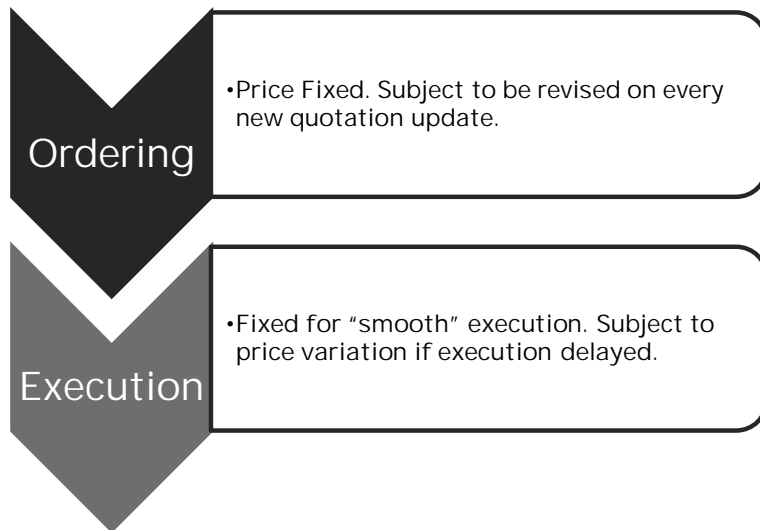
ABB will provide notification of readiness for shipment 3 working days in advance. In the event purchaser will not arrange material pick-up / receipt on the advised date, ABB will charge 0.1% of the value of the material per day to compensate additional handling and storage cost.

Cost Increase Risk Mitigation

Escalation Formulas Application – Quotation Stage

#2 Preferred Situation

- A. Quotation Validity 30 Days
- B. Execution Price linked to PPI



Clause for Execution Price Correction:

Validity offer is 30 days and Prices are firm for deliveries within **6 months** from PO date on condition that Release for manufacture/Final Drawing Approval* is done latest **xx** weeks from date of PO. In case Final Drawing Approval is provided after this period, prices are subject to inflation correction as per the Producer Price Index in **[insert country of production or if not accepted then to use Eurostat EU-27*]** according to following formula.”

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = **PPI month of Offer**

PPI_1 = **PPI month of Final Drawing Approval**

P_1 = new price

P_0 = original price

PPI Index: [Statistics | Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&code=sdg_8_10_10_1)

**NOTE: An Approved documentation (BS/SD) means the status of the drawings submitted by the customer is free from any comments and fully ready for the production process. Approval with comments is not considered as approved and must be re-approved back again by the customer once comments are implemented by ABB.*

Cost Increase Risk Mitigation

Escalation Formulas Application – Quotation Stage

#3 Preferred Situation (incl. FAs)

- A. Quotation Validity over 30 Days
- B. Ordering price linked to PPI
- C. Execution Price linked to PPI



Clause for PO Price Correction:

Validity offer is until **(defined time)** and Prices are fixed for the first 30 days. For POs later than 30 days after Offer issue date, price will be subject to correction as per the Producer Price Index in **[insert country of production or if not accepted then to use Eurostat EU-27*]** according to following formula.”

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = **PPI month of Offer**

PPI_1 = **PPI month of Order**

P_1 = new price

P_0 = original price

PPI Index: [Statistics | Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=sdg_8_8_10&plugin=1)

Clause for Execution Price Correction:

Prices at ordering calculated per Clause 1 are firm for deliveries within **6 months** from PO date on condition that Release for manufacture/Final Drawing Approval* is done latest **xx** weeks from date of PO. In case Final Drawing Approval is provided after this period, prices are subject to inflation correction as per the Producer Price Index in **[insert country of production or if not accepted then to use Eurostat EU-27*]** according to following formula.”

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = **PPI month of Order**

PPI_1 = **PPI month of Final Drawing Approval**

P_1 = new price

P_0 = original price

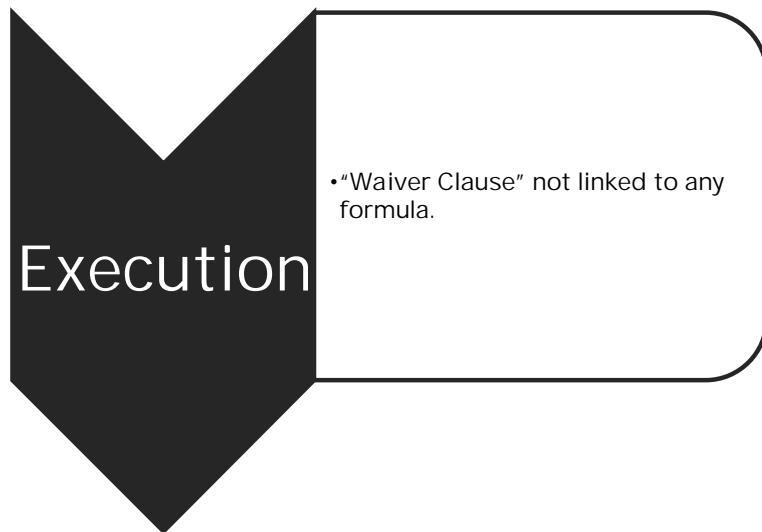
PPI Index: [Statistics | Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=sdg_8_8_10&plugin=1)

Cost Increase Risk Mitigation

Escalation Formulas Application – Contract Stage

#1 Preferred Situation

A. Open Clause for cost Increases



Waiver Clause:

If one or more costs should vary between the order date and the moment of delivery of each lot, the price will be changed to reflect the increase in said costs.

If the approval of drawings or other design documents is delayed beyond contractually agreed schedule and/or if substantial modifications are requested by the Purchaser during the design or manufacturing period over and above agreed specifications, ABB will reserve the right to adjust the price and delivery time accordingly

If dispatch is delayed due to lack of instruction by the Purchaser or any reason not attributable to ABB, ABB reserves the right to deliver the equipment to an internal/external warehouse, which will keep materials as depositary on behalf of the Purchaser. The equipment shall be considered as dispatched; all payments shall be due accordingly and costs for warehouse and following dispatch shall be borne by the Purchaser, plus an additional 15% of the actual cost as administration charges. The title of the Supply, and the related risks, shall pass to Purchaser from the day of delivery of the equipment to the internal/external warehouse

ABB will provide notification of readiness for shipment 3 working days in advance. In the event purchaser will not arrange material pick-up / receipt on the advised date, ABB will charge 0.1% of the value of the material per day to compensate additional handling and storage cost.

Cost Increase Risk Mitigation

Escalation Formulas Application – Contract Stage

#2 Preferred Situation

A. Execution Price linked to PPI



Clause for Execution Price Correction:

Validity offer is 30 days and Prices are firm for deliveries within 6 months from PO date on condition that Release for manufacture/Final Drawing Approval* is done latest xx weeks from date of PO. In case Final Drawing Approval is provided after this period, prices are subject to inflation correction as per the Producer Price Index in [insert country of production or if not accepted then to use Eurostat EU-27*] according to following formula.”

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = PPI month of Contract

PPI_1 = PPI month of Final Drawing Approval

P_1 = new price

P_0 = original price

PPI Index: [Statistics | Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&plugin=1)

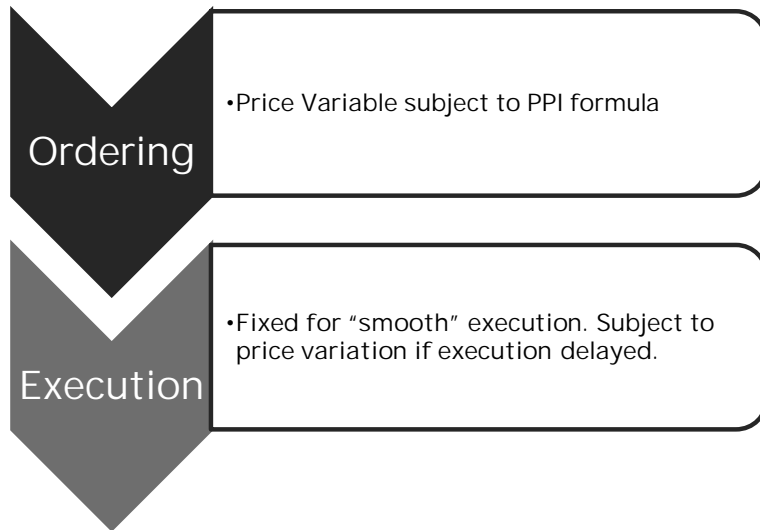
**NOTE: An Approved documentation (BS/SD) means the status of the drawings submitted by the customer is free from any comments and fully ready for the production process. Approval with comments is not considered as approved and must be re-approved back again by the customer once comments are implemented by ABB.*

Cost Increase Risk Mitigation

Escalation Formulas Application – Contract Stage

FAs with “Call Off” Orders

- A. PO Price linked to PPI
- B. Execution Price linked to PPI



Clause for PO Price Correction:

Prices are firm for POs (“call of orders”) within 30 days after Offer issue date. For each Purchase Order later than 30 days after Offer issue date price will be subject to correction as per the Producer Price Index in [\[insert country of production or if not accepted then to use Eurostat EU-27*\]](#) according to following formula.”

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = PPI month of Offer

PPI_1 = PPI month of Order

P_1 = new price

P_0 = original price

PPI Index: [Statistics | Eurostat \(europa.eu\)](#)

Clause for Execution Price Correction:

Prices at ordering calculated per Clause 1 are firm for deliveries within [6 months](#) from PO date on condition that Release for manufacture/Final Drawing Approval* is done latest [xx](#) weeks from date of PO. In case Final Drawing Approval is provided after this period, prices are subject to inflation correction as per the Producer Price Index in [\[insert country of production or if not accepted then to use Eurostat EU-27*\]](#) according to following formula.”

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = PPI month of Order

PPI_1 = PPI month of Final Drawing Approval

P_1 = new price

P_0 = original price

PPI Index: [Statistics | Eurostat \(europa.eu\)](#)

Cost Increase Risk Mitigation

Escalation Formulas Application – Contract Stage

FAs with Lot Deliveries defined

A. Execution Price linked to PPI



Clause for Execution Price Correction:

Prices for each Lot/Delivery are firm for deliveries within **6 months** from PO date on condition that Release for manufacture/Final Drawing Approval* is done latest **xx** weeks from date of PO.

(PREFERRED) In case delivery date exceeds **6 months** from PO date, price recalculation will be for each separate LOT/delivery in time of actual Release for manufacture/Final Drawing Approval for that LOT/delivery. The adjustment will be calculated according to the following formula:

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = PPI month of Order

PPI_1 = PPI month of Final Drawing Approval

P_1 = new price

P_0 = original price

PPI Index: [Statistics | Eurostat \(europa.eu\)](https://statistics.eurostat.eu)

Or

(NOT PREFERRED) Prices for each Lot/Delivery are firm for deliveries within **1 Month Tolerance** from Original Schedule date.

In case delivery date exceeds **1 Month Tolerance** from Original Schedule date, price recalculation will be for each separate LOT/delivery in time of actual Delivery Date for that LOT/delivery. The adjustment will be calculated according to the following formula:

$$P_1 = P_0 \left(1 + \frac{PPI_1 - PPI_0}{PPI_0} \right) = \text{new price in absolute value}$$

Where:

PPI_0 = PPI month of Original Schedule date

PPI_1 = PPI month of Actual Delivery Date

P_1 = new price

P_0 = original price

PPI Index: [Statistics | Eurostat \(europa.eu\)](https://statistics.eurostat.eu)

Reformulated

Cost Increase Risk Mitigation

PPI Explained

Context

PPI data are widely used by both the business community and government, and enable monthly monitoring of prices at different stages of the manufacturing process. There are three major uses of PPIs.

- As an economic indicator – PPIs capture price movements prior to the retail level. Therefore, they may foreshadow subsequent price changes for businesses and consumers. They can be an early indicator of inflationary pressures in the economy. These data are used in formulating fiscal and monetary policies.
- As a deflator of other economic series – PPIs are used to adjust other economic time series for price changes.
- As the basis for contract price adjustments (escalation) – PPI data are used in escalating purchase and sales contracts. These contracts typically specify amounts of money to be paid at some point in the future. It is often desirable to include an escalation clause that takes account of increases in input prices.
- The definition of prices – The price collected for an item included in the PPIs is the revenue received by its producer. Sales and excise taxes are not included in the price because they do not represent revenue to the producer. The price collected for an item included in the CPI is the expenditure by a consumer for the item. Sales and excise taxes are included in the price because they are necessary expenditures by the consumer for the item.
- The composition of the set of commodities and services – The target set of goods and services included in the PPIs is the entire marketed output of the producers. The set includes both goods and services purchased by other producers as inputs to their operations or as capital investment, and goods and services purchased by consumers either directly from the service producer or indirectly from a retailer. Because the PPI target is the output of the producers, imports are excluded. The target set of items included in the CPI is the set of goods and services purchased for consumption purposes by the households. This set includes imports.

Data sources

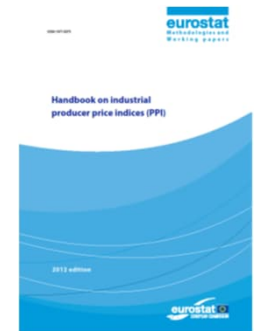
Coverage

The data collection at European level is based on Regulation (EU) No 2019/2152 (European Business Statistics Regulation) of 27 November 2019 and Commission Implementing Regulation (EU) No 2020/1197 of 30 July 2020. In addition to the regulations there is also a methodological guide to ensure consistent data collection in all countries which was developed by Eurostat with the help of Member States.

All Member States are obliged to transmit data at 2-digit level of the NACE classification (an EU standard classification of economic activities) for:

- Mining and quarrying (Section B);
- Manufacturing (Section C);
- Electricity, gas and water supply (Section D and division E36).

The industrial producer price index is published monthly. Countries send data to Eurostat no later than one month and 5 days after the end of the reference period. Eurostat publishes the European price index one month and 5 days after the reference period.



ABB