

# Methodology Fish Pool Index™ and Monthly Settlement Price

This methodology is published at Fish Pool webpage

Fish Pool is the administrator of two (2) benchmarks. Fish Pool Index (FPI) is a weekly index. Monthly Settlement Price (MSP) is a monthly index calculated from FPI. MSP is used for settlement of Fish Pools financial salmon contracts.

FPI and MSP are provided in NOK per kilogram.

Fish Pool Index (FPI) uses input data from two contributors:

1. The approved benchmark administrator Nasdaq Clearing (hereafter Nasdaq), which creates the weekly benchmark Nasdaq Salmon Index (NSI), and
2. The public authority Statistics Norway, which creates the weekly export price for fresh salmon (hereafter SSB)

The two contributors use input data from transactions to calculate the indices used by Fish Pool. The indices Fish Pool uses to calculate the two benchmarks does not comprise volume information, number of reported transactions, nor any other market information.

## **1.1 Rationale**

### **1.1.1 Fish Pool Index™**

Fish Pool Index™ (FPI) is a weekly index. FPI is calculated every week and published at Fish Pool Website. FPI is calculated from one or several price indices with the aim of reflecting the correct market price for each week. FPI aims at reflecting the market price for:

- Superior quality Salmon
- Head on gutted
- Iced and packed in boxes
- Reference exporters selling price FCA Oslo

To reflect one market price for salmon, an average of salmon size 3-6 kg is established.

### **1.1.2 Monthly Settlement Price**

FPI is the index used to create The Monthly Settlement Price (MSP) which is the benchmark used to settle all financial contracts traded at Fish Pool

### **1.1.3 Nasdaq Salmon Index**

The Nasdaq Salmon Index has been in operation since 1995 with different operators:

- 1995-2008 by Norske Sjømatbedrifters Landsforening and FHL, today Sjømatbedriftene and Sjømat Norge
- 2008- by NOS Clearing. Merged with Nasdaq Clearing AB in 2014, thereafter operated by Nasdaq Clearing AB

This reference price is recognized in the salmon industry as being the best spot price reference available. The index is transaction based, and is a weighted average of input price reported by large Norwegian Exporters with an export license. It is estimated that approximately 2/3 of total Norwegian export is represented by the exporters reporting to Nasdaq. The report is published

every Tuesday and gives an average price per size in the previous week. Annual, external audits have documented high quality in the reporting. All prices reported have an audit trail down to each single invoice.

The NSI has rules securing that no contributor may constitute a significant proportion ( at present 25%) of the total input data for the benchmark.

The best sign of such trust is that a number of salmon farmers and European salmon buyers have what is called “Nasdaq indexed” supply contracts. They do not negotiate prices every week, but base the invoicing on the Nasdaq price published every Tuesday in the week following delivery.

**1.1.4 SSB, Statistics Norway**

The export price is calculated and published by Statistics Norway (SSB) and contains 100 % of export volume of fresh salmon with invoice documentation from custom clearance. The index is strong, as it is obliged by law to report invoice data in the process of custom clearance.

The weakness of the index is that it does not contain size or quality information, nor information of when the price in the invoice was agreed. SSB thus contains both fixed price and spot price deliveries of salmon, as is thus not regarded as the best source of spot price information of salmon in the industry.

**1.1.5 Market price for salmon**

The weighting of 95 % Nasdaq and 5 % SSB reflects the assessment of the ISB and the Board of Fish Pool as the best reflection of the spot prices of salmon.

**Calculation**

The following weightings are used when calculating FPI:

Index	Description	Weighting
Nasdaq Salmon Index	Average of achieved sales prices for exporters (Superior salmon 3-6 kilo).	95 %
SSB Export price,	Export price for fresh Salmon from Norway. Average of all sizes and qualities.	5 %

Fish Pool uses fixed weightings of the two indices.

**1.2 Weight distribution**

Some indices reflect the price of salmon according to weights. To compute a market price, Fish Pool uses the following formula:

Index	Price by sizes	Weighting
Nasdaq Salmon Index	Yes	30 % SUP3-4 40 % SUP4-5 30 % SUP5-6
SSB Export price	No	None

All index elements and currency rates will be registered with 2 decimals as basis for calculating FPI and MSP.

### **1.3 MSP and final settlement date**

MSP is calculated as the simple average of the weekly prices (not volume weighted) included in the Month. The MSP for Fish Pools contracts will be published at the latest by the final settlement date. The final settlement is decided by Nasdaq Clearing, the present date is the second Friday in the following Month (or the next Trading day if the Friday is not a Trading day). App 1 to the Fish Pool Rulebook contains the Trading Schedule documenting which weeks belongs to each Month

### **1.4 Price corrections**

Fish Pool makes a weekly assessment of price inputs used for calculating the FPI – price. In case of price deviations above set thresholds or feedback from Trade members a QA deviation will be opened. Also in the unlikely event of an erroneous calculation due to technical input errors or incorrect application of this methodology a QA deviation will be opened. Fish Pool will investigate, correct and publish a correction as soon as Fish Pool becomes aware of it according the Rulebook app 2 Fish Pool Index. Information about the correction and an explanation of the reason for the correction will be published on the Website.

Fish Pool will, if the MSP was erroneous, correct the MSP, provided that the Clearinghouse will perform a corrective settlement based on the updated MSP according to the rulebook of the Clearinghouse.

### **1.5 When an index is unavailable**

Fish Pool collects the input data electronically. All index elements are normally available latest Wednesday the week after observation. FPI is calculated and made available soon thereafter. If the input data are not available Wednesday, FPI is calculated as soon as the input data are available. If the input data may not be made available or may be made available with a delay of three days or more, the ISB must be contacted and evaluate sufficient measures.

### **1.6 Judgement and minimum amount of transaction data**

Fish Pool does not receive information regarding transactions included or excluded in any of the input data. Fish Pool may only exclude or change weighting of the input data according to the Rulebook. Every Wednesday morning when the SSB export price is ready, the assessor shall enter available spot price information into the system giving Alert bells in case of deviations above thresholds. Based on advice from the Index Surveillance board, the Fish Pool of directors may change the index calculation according to the Rulebook app 2 Fish Pool Index, chapter 7.2 Special situations.

The calculation of FPI is made automatically when all input data are available. This automatic production ensures consistency between assessors of FPI. 2 named Fish Pool employees with the necessary experience and competence will be assessors.

FPI and MSP are calculated as stated above when both indices are available. Fish Pool does not require a minimum amount of transaction data for the benchmark calculation.

Fish Pool Rulebook appendix 2 lays out the procedure of how Fish Pool Index Surveillance Board (ISB) will act if one or several parts of NSI and/or SSB cannot be created. The procedures in Fish Pool

Rulebook appendix 2 includes procedures on how ISB shall ensure the benchmarks if no index is available for calculation.

## **1.7 Procedures for and documentation of communications**

All communication between Fish Pool and the contributors, SSB and Nasdaq, or between Fish Pool and the ISB shall be documented. An inquiry by Fish Pool to the Contributor that is not satisfactorily handled will be presented to the ISB, and if necessary escalated to the management of the contributor.

## **1.8 Assessment and audit**

### **1.8.1 Internal assessment**

By a contractual agreement with Oslo Børs, Fish Pool Index Surveillance Board (ISB) conducts an internal assessment of FPI and MSP every quarter. The internal assessment is based on a report from Fish Pool with an examination of the methodology for the purpose of ensuring that FPI and MSP reliably reflects the physical market, and a documentation that the methodology was properly applied. ISB may conduct all necessary investigations and engage experts to secure verification and quality of the quarterly review. Fish Pool keeps an audit trail of relevant information for at least five years in order to document the construction of its calculations.

### **1.8.2 External audit**

Fish Pool has entered an agreement with Kontali Analyse that engages them as the external auditor of FPI. Every year Kontali Analyse investigates the methodology used to calculate FPI and the market acceptance of the methodology. Kontali Analyses report is presented to ISB and Fish Pool Board of Directors before made public at Fish Pool Webpage.

### **1.8.3 Changes based on assessments and audit**

If the internal assessment or external audit recommends changes, The board of directors has the mandate to change the methodology including the contributors to FPI according to Fish Pool Rulebook appendix 2.

### **1.8.4 Audit trails**

Fish Pool document and saves all index data for a minimum of five years.

Fish Pool does not collect the following information, as this is not available for Fish Pools calculation of FPI:

- Whether a calculation of any of the input indices excluded a particular transaction, which otherwise conformed to the requirements of the relevant methodology for that calculation, and the rationale for doing so – Fish Pool is not informed of transactions
- The identity of each person who submitted or otherwise generated any of the information used to calculate the data – FPI is calculated electronically without the need of any person to generate the benchmark

## **1.9 Complaints**

If a Trade Member or a member of the public has a question, wishes to raise issues, submit complaints about FPI, MSP or Fish Pools administration of the benchmarks, suggest changes to the calculation or methodology and/or provide other feedback, Fish Pool has several levels of service to handle complaints. The complaints policy is explained in detail in Fish Pool Rulebook appendix 2.

### **1.10 Changes to this methodology and change log**

The main reason to change this methodology shall be to better reflect the market price for salmon. Any changes to the methodology must follow the procedures laid out in Fish Pool Rulebook appendix 2.

Changes to FPI due to lack of index data is also included in Fish Pool Rulebook appendix 2.

<b>Date</b>	<b>Version</b>	<b>Items changed</b>	<b>Description</b>
June-20	1.0		Initial publication
Nov-20	1.1	1.8 and layout	ISB does assessments (not audits) and layout changes