

Pixi-book concerning implementation/management of number portability for the individual operator. Requires prior knowledge of the Rules & Procedures as well as the Transaction document, as the Number Porting area uses many topic-specific terms.

Term	Explanation
CPS code	A code that is assigned the operator by OCH CPS code 010xx = Network operator CPS code 00xxx = Service Operator with a direct connection to the OCH System CPS code 08xxx = Service Operator without a direct connection to the OCH system CPS code 09xxx = Passive operator
Customer-ID	Customer account number with the donor operator. Replaces the power of attorney if it is disclosed in the porting request.
FIXED	Landline numbers used to regular landlines, VoIP and premium rate numbers (70/80/90 numbers).
GSM - Global System for Mobile Communications	Mobile telephone numbers.
ICC – Simcard number	The number is printed on the SIM card and if it is disclosed in a mobile porting, replacing the of power of attorney.
ICH Internal Clearing House	Generic term for the applications each direct operators use to communicate with the OCH system. An ICH can be self-built or purchased from one of the Danish suppliers of ICH Systems.
Interconnect	Two networks exchanging traffic with each other. If operator A doesn't have interconnect with operator B, operator A send its traffic through operator C who has interconnect to operator B. This makes operator C interconnect operator for operator A.
NO – Network Operator	An operator with their own network. Will always have a CPS code 010xx.
Number Type	In the OCH system there are two number types: GSM used for mobile, and FIXED which is used for regular landline, VoIP and premium rate numbers (70/80/90 numbers). It is not allowed to change the Number Type in a porting. A number must retain the number type the Danish Energy Agency has awarded it.
OCH A/S	The company Operators Clearing House A/S, that owns and operates the Danish OCH system. You have to have an agreement with OCH when terminating traffic in the Danish network.
OCH Online	Online access to the OCH system where you can get status on all numbers and portings in the Danish network, active or completed

OCH System	The software system used to run all administrative Number portability in Denmark. The system also maintains the Danish numbering and routing plan.
NPA - Nummer Portering Ansvarlig (Numberporting responsible)	NPA maintains Rules & Procedures and the Transaction document, and serves as the operational body that decides and implements NP conditions. The group refers to the steering committee, which is TI's highest authority (except TI's board).
R&P - Rules & Procedures	The document describes how number portability is handled in Denmark. Any operator who terminates traffic in the Danish network must comply with the rules in this document.
SO – Service Operator	A service provider without its own network, which uses a Network operator's network. The operator will have a CPS code 00xxx, if he has a connection to OCH-system; and will have a CPS code 08xxx, if connected to the OCH system.
SOAP - Simple Object Access Protocol	Application Program Interface between ICH and OCH
TI – Telecom Industry Association	Association under the Confederation of Danish Industry of which many telecom operators are a member of.
Transaction document	The document elaborates Rules & Procedures and constitutes specification to the OCH-system. Any operator who terminates traffic in the Danish network must comply with the rules in this document.

Topic	Description	Contact
OCH agreement:	There has to be an agreement with OCH A/S. Description of connections and agreements can be found on www.OCH.dk . The agreement regards CPS code to the OCH system, prices for connectivity and transactions, OCH-Online and communication protocol against OCH-system	OCH A/S: Administration Mail: Administration@och.dk Phone.: +45 60101066
Opkobling	1a. Direct connection <ul style="list-style-type: none"> - Internal Clearing House through 3rd Party - Connection: SOAP - Access to OCH test environment if needed - Incl. Access to OCH online - Contact information must be 	

	<p>visible and updated on OCH Online</p> <ul style="list-style-type: none"> - 14 day notice for the implementation date - A Neetwork operator always has a direct connection 	
	<p>1b. Indirect connection</p> <ul style="list-style-type: none"> - No Internal Clearing House - Connection via Network operator - Access to OCH Online - Contact information must be updated and visible on OCH Online - 14 day notice for the implementation date 	
NP-agreement/ bilateral agreement	<p>Operator has to enter into agreement regarding Numberporting. Agreement consists of: Industry agreement (voluntary) NP agreement with all operators</p> <ul style="list-style-type: none"> - Appendix 1 Pricing must be filled and included - Appendix 2 Ethical direction must be included 	<p>Agreements can be found here: Industry Association http://www.telein du.dk/</p> <p>Operator info can be found on OCH Online</p>
	<p>NP agreement can be extended with bilateral agreements regarding:</p> <ul style="list-style-type: none"> - ICC/Customer ID validation - Elektronik power of attorney, BtB 	
	ICC Validation: Possible to send ICC number for validation instead of power of attorney.	
	Customer ID validation: Possible to send Customer Id for validation instead of power of attorney.	
NB	There may be differences for operators in whether certain customer segments can be ported using ICC validation (eg. large business customers)	
NB	Power of attorney must always be obtained before starting a numberporting regardless of customer ID or ICC validation	

	Electronic power of attorney for private customers is implicit in the NP Agreement. Electronic power of attorney for business customers must be agreed upon by signing bilateral agreement	
Number implementation	Follow current procedure if you want to implement your own number range	https://ens.dk/ansvarsomraader/telefoni/numre
RI/CI	<p>Application and approval of Routing/Charting Code is done via OCH Online. The application must contain the following information:</p> <p>Operator name: CPS-code: ServiceOperator: Networkoperator: Interconnect: Numberrange: NumberType: Wanted RI/CI: Date of implm.: Approval period: 14 days</p> <p>More information regarding RI/CI codes can be found in Rules & Procedures</p> <p>RI/CI (Routing Info/Charging Info) is used for mobile numbers and often for 70/80/90 numbers and VoIP numbers</p>	
	Implementation information (via mail) is sent automatically to all operators for implementation in their network. Implementation time can vary for each operator.	
	Implementation of OCH System is done by the direct connected operator. For the indirect operator the implementation of the OCH system is done by the network operator.	
	<p>To implement a number range the following requirements must be met:</p> <ul style="list-style-type: none"> - CPS code active - RI/CI code approved - Number range must be allocated Danish Energy Agency - Implementation request must be approved 	
NB	Number type must be the same as specified in the Danish number plan	
NB	RI/CI codes are approved for specific number types and cannot be used for another number type	

Operator contact information	Address, email and phone numbers can be found on OCH Online.	
Disputes between operators	Disputes between operators must be resolved by mediation or referred to the appropriate authority or court.	
Disputes between operators – NPAs role	<ol style="list-style-type: none"> 1. TI-members can discuss the interpretation of NP rules and contractual changes 2. Non TI-members can approach the NPA on general issues which the group can discuss. 3. NPA under TI and NPA president has no mandate to impose on operators how they interpret Industry NP-rules. 	www.teleindu.dk NPA chairman: Mona Schnell Mail: mll@telenor.dk
Disputes between operators – OCH A/S's role	<ol style="list-style-type: none"> 1. OCH A/S can not mediate or settle questions when in doubts regarding Nummerporting as the NP rules are governed by the industry's NP agreements. 2. The agreement between OCH A/S and the operator includes the operators obligation to comply with Rules & Procedures and Transaction document. 3. OCH A/S has the right to disconnect the operators connection if they are not compliant with Rules & Procedures/Transaction document. 	OCH A/S: Administration Mail: Administration@och.dk Tlf.: +45 60101066