

LETTERA D'ORDINE


CIG	CIG: B109C467ED	CUP	B53D13000720007		
Spett.le Ragione sociale AMS-IX Indirizzo: Frederiksplein 42, 1017 XN Amsterdam, The Netherlands VAT: NL808792933B01 e-mail: info@ams-ix.net					

Pos.	Quantità	Descrizione	Prezzo unit.	Importo
1	1	Service AMS-IX Connection Agreement for Customers per 14 mesi PERIODO 01/06/2024-31/07/2025	€ 4.900,00	€ 4.900,00
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LUOGO DI CONSEGNA			Imponibile	€ 4.900,00
Istituto di Informatica e Telematica - Area della Ricerca CNR Pisa			IVA 22%	
Via G. Moruzzi, 1 - 56124 - PISA			Totale	€ 5.978,00
CODICE UNIVOCO UFFICIO (CUU): WD4U09				
Riferimenti:				
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Il Direttore. F.F. Dott. Marco Conti

 Consiglio Nazionale delle Ricerche
Istituto di Informatica e Telematica - CNR
Il Direttore
(Dott. Marco Conti)

CONDIZIONI GENERALI DI ACQUISTO

1. **Ambito di applicazione:** Le presenti condizioni generali di acquisto hanno la finalità di regolare in modo uniforme i rapporti contrattuali con i fornitori dai quali il CNR acquista beni e/o servizi in applicazione delle norme di legge e di regolamento. Le condizioni di vendita del fornitore non saranno in nessun caso applicabili ai rapporti contrattuali con il CNR, anche se fossero state richiamate in qualsiasi documento proveniente dal fornitore stesso.
2. **Resa:** Franco destino.
3. **Fatturazione:** La fattura, redatta secondo la normativa vigente, dovrà riportare, pena il rifiuto della stessa, il numero d'ordine (corrispondente al numero di registrazione al protocollo), il CIG e l'eventuale CUP.
4. **Pagamento:** Il pagamento sarà effettuato entro 30 gg. a partire dalla data del certificato di regolare esecuzione.
5. **Tracciabilità dei flussi finanziari:** Il fornitore assume tutti gli obblighi di tracciabilità dei flussi finanziari di cui all'art. 3 della L. 136/2010 e s.m.i. . Il mancato utilizzo del bonifico bancario o postale ovvero degli altri strumenti di incasso o pagamento idonei a consentire la piena tracciabilità delle operazioni costituisce motivo di risoluzione unilaterale del contratto. Il fornitore si impegna a consentire all'Amministrazione la verifica di cui al c. 9 art. 3 della legge 136/2010 e s.m.i. e a dare immediata comunicazione all'Amministrazione ed alla Prefettura-UTG della provincia ove ha sede l'Amministrazione della notizia dell'inadempimento della propria controparte (subappaltatore/subcontraente) agli obblighi di tracciabilità finanziaria.
6. **[Per ordini inferiori a 40.000 euro] Clausola risolutiva espressa:** L'ordine è emesso in applicazione delle disposizioni contenute all'art. 52, commi 1 e 2 del d.lgs 36/2023. Il CNR ha diritto di risolvere il contratto/ordine in caso di accertamento della carenza dei requisiti di partecipazione. Per la risoluzione del contratto trovano applicazione l'art. 122 del d.lgs. 36/2023, nonché gli articoli 1453 e ss. del Codice Civile. Il CNR darà formale comunicazione della risoluzione al fornitore, con divieto di procedere al pagamento dei corrispettivi, se non nei limiti delle prestazioni già eseguite.

Per accettazione (firma digitale)



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AMS-IX MASTER SERVICES AGREEMENT

THIS MASTER SERVICES AGREEMENT IS CONCLUDED BETWEEN:

1. **Amsterdam Internet Exchange B.V.**, a private company with limited liability, incorporated under the laws of the Netherlands with its seat in Amsterdam and its principal place of business at Frederiksplein 42, 1017 XN Amsterdam, registered with the trade register of the Chamber of Commerce under number 34128666 ("AMS-IX"); and
2. **Istituto di Informatica e Telematica - CNR**, incorporated under the laws of Italy with its seat in Pisa and its principal place of business at via G. Moruzzi 1, 56124 Pisa ("Customer").

AMS-IX and Customer are hereafter collectively referred to as the "**Parties**", and each individually as a "**Party**".

RECITALS:

- a. AMS-IX is in the business of providing access to the Interconnect Platform and rendering the Services;
- b. The Customer wishes to either access the Interconnect Platform or to procure Services from AMS-IX or both;
- c. The Agreement sets forth the rights and obligations of the Parties.

THE PARTIES HEREBY AGREE AS FOLLOWS:

1. DEFINITIONS

- 1.1. The definitions used in this Master Services Agreement (MSA), shall have the same meaning as those included in the AMS-IX General Terms and Conditions as provided together with this MSA and which can also be found at the AMS-IX website (GTC).

2. INTERCONNECT PLATFORM

- 2.1. If so agreed between Parties, AMS-IX shall provide the Customer with access to the Interconnect Platform, in accordance with the provisions of the Agreement.

3. SERVICES

- 3.1. If so agreed between Parties, AMS-IX shall render Services to Customer in accordance with the provisions of the Agreement.
- 3.2. If so agreed between Parties, the Parties will conclude a Service Level Agreement (SLA) describing amongst others the service levels, the quality of the services, the service credits for non-delivery, unavailability or underperformance and the processes and procedures to be followed. The service level agreement will (if so concluded) be attached as an addendum to a Schedule.

4. ORDERS AND FEES

- 4.1. Customer may at discretion request a quote from AMS-IX, but may only place an order if the Agreement has been signed by both Parties. Customer may issue purchase orders through the AMS-IX Portal. Confirmation of a purchase order by AMS-IX shall take place by means of an Order Confirmation. The Order Confirmation, either in writing or in electronic format, shall include a reference to the fees, quantity, what is being purchased. The Order Confirmation will list any specific agreements made between the Parties.

Initial AMS-IX:

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Initial Customer:

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5. TERM

The Agreement shall be effective on the date of its signing by both Parties. The Agreement can be terminated at any time by any of the Parties by means of a notice by a registered contact.

6. GENERAL TERMS AND CONDITIONS

6.1. The Parties agree that the GTC shall exclusively apply to this MSA, the Schedules, all documents issued pursuant thereto or thereunder (including Order Confirmations). AMS-IX herewith rejects the applicability of the general terms and conditions of the Customer or of any other party.

6.2. Customer confirms that it has received a copy of the GTC. AMS-IX is authorized to make amendments thereto. The amended GTC will come into effect as soon as the Customer is notified thereof. In case the Customer does not object to the amended provision within statutory period of 60 days, such amendments will be effective. Such notification will be sent to one or more duly authorised representatives (CCP) and the amended GTC will be posted on the website of AMS-IX.

7. MISCELLANEOUS

7.1. The Agreement constitutes the entire agreement and understanding of the Parties with respect to its subject matter and replaces, and supersedes all prior agreements, arrangements, undertakings or statements regarding such subject matter.

7.2. If any of the documents that are part of the Agreement are inconsistent, i) the MSA shall prevail over the GTC, the Schedules and addenda thereto and the Order Confirmations (unless explicitly otherwise stated therein), ii) the GTC shall prevail over the Schedules and addenda thereto and the Order Confirmations (unless explicitly otherwise stated therein), and iii) the Schedules and addenda thereto shall prevail over the Order Confirmations (unless explicitly otherwise stated therein).

7.3. It is explicitly understood that nothing in the Agreement shall be construed so as to make Parties partners or to construe their relationship as an employment relationship, joint venture, franchise, distributor, commissionaire or agency, co-owners or otherwise as participants in a joint undertaking.

7.4. If any provision of the Agreement is or becomes invalid or non-binding, the Parties shall remain bound by all other provisions hereof. In that event, the Parties shall replace the invalid or non-binding provision by provisions that are valid and binding and that have, to the greatest extent possible, a similar effect as the invalid or non-binding provision, given the contents and purpose of such provision and the Agreement.

8. GOVERNING LAW AND DISPUTES

8.1. The Agreement shall be governed by the laws of the Netherlands. Any dispute with regard hereto will be brought exclusively before the competent court of Amsterdam, the Netherlands.

IN WITNESS WHEREOF the Parties have each caused this Agreement to be executed and delivered by one or more duly authorised representatives.

DocuSigned by:

Peter van Burgel

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Amsterdam Internet Exchange B.V.

By: Peter van Burgel

CEO

Date: 31 May 2024

Consiglio Nazionale delle Ricerche
Istituto di Informatica e Telematica - CNR

Il Direttore

Istituto di Informatica e Telematica - CNR

By: Marco Conti

Date:

Initial AMS-IX:

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Initial Customer:

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AMS-IX GENERAL TERMS AND CONDITIONS

These AMS-IX General Terms and Conditions are provided together with the AMS-IX Master Services Agreement and can also be found at the AMS-IX website and shall apply to agreements between AMS-IX and the Customer as defined and set forth below.

1. DEFINITIONS

1.1 For the purpose of the Agreement, the following terms shall have the following meaning:

- a) **Agreement:** means the MSA, these GTC, the Schedules and addenda thereto and the Order Confirmations.
- b) **AMS-IX:** Amsterdam Internet Exchange B.V., a private company with limited liability, incorporated under the laws of the Netherlands with its seat in Amsterdam and its principal place of business at 1017 XN Amsterdam, Frederiksplein 42, registered with the trade register of the Chamber of Commerce under number 34128666.
- c) **AMS-IX Association:** the association 'Vereniging Amsterdam Internet Exchange', having its registered office in Amsterdam, The Netherlands.
- d) **AMS-IX IP-address:** means one or more IP-addresses, for Customer's own router out of a dedicated range reserved per service type on the Interconnect Platform.
- e) **AMS-IX Portal:** AMS-IX web interface through which the Customer orders Services.
- f) **AMS-IX website:** means the AMS-IX website at ams-ix.net.
- g) **Allowed traffic:** a set of restrictions imposed by AMS-IX B.V. on what kind of traffic is allowed to be sent by a Customer through the AMS-IX Infrastructure, as published on the AMS-IX website.
- h) **Article:** means an article of the Agreement.
- i) **Access Connection:** one or more physical interface that allows the Customer (directly or via third party network) to access the AMS-IX Interconnect Platform.
- j) **Change of Control:** means the sale of all or substantial part all of the assets of a Party or any merger, consolidation or acquisition of a Party with, by or into another corporation, entity or person or any change in the ownership of more than 50% of the voting capital stock of a Party in one or more related transactions.
- k) **Colocation:** any data centre premise where AMS-IX services are located.
- l) **Confidential Information:** means all trade secrets, know-how and all other information disclosed by a Party to the other Party, including business information and technical information, provided that it is disclosed reasonably in connection with the Agreement.
- m) **Customer:** the party that is indicated as "Customer" in and that has signed the MSA.
- n) **Effective Date:** the date as set forth in Article 7.1.
- o) **Fees:** the fees for access to the Interconnect Platform or for the Services or both.
- p) **Force Majeure:** has the meaning as set forth in Article 10 hereof.
- q) **General Terms and Conditions (GTC):** these general terms and conditions, governing the MSA, the Schedules and addenda thereto and all documents issued pursuant thereto or thereunder (including Order Confirmations) which can also be found at the AMS-IX website.
- r) **Initial Term:** the term as set forth in Article 7.1 hereof.
- s) **Interconnect Platform:** is a point of convergence for disparate networks that connect with the intention of exchanging network traffic with one or more parties. The networks connect to the Interconnect Platform from



various locations, through diverse means, e.g. physically (a direct fibre connection), remotely (using a transport provider), or virtually (a reseller that multiplexes multiple connections on a single physical port). More detailed specifications of the Interconnect Platform (which may be amended from time to time by AMS-IX) can be found on the AMS-IX website.

- t) **Intellectual Property:** means and includes all trademarks, technical knowledge, inventions, patents, creations, knowhow, formulations, recipes, specifications, designs, methods, processes, techniques, data, rights, devices, drawings, instructions, expertise, trade practices, trade secrets, computer data, source codes, analytical and quality control data, copyrights (including rights in software), commercial information and other information relating to the design, development, manufacturing, assembly, testing, marketing and sale of the Interconnect Platform and all other intellectual property and forms of protection of a similar nature, whether registered or not, patented and patentable or not.
- u) **Invoice Date:** the date as set forth in Article 6.1 hereof.
- v) **Master Services Agreement (MSA):** The Master Services Agreement between Customer and AMS-IX, setting forth the terms and conditions pursuant to which AMS-IX provides access to the Interconnect Platform or renders the Services to Customer or both.
- w) **Order:** the purchase order submitted by Customer through AMS-IX Portal for the Services.
- x) **Order Confirmation:** the confirmation by AMS-IX of an order placed by Customer through the AMS-IX Portal.
- y) **Party:** means either AMS-IX or the Customer, as the case may be.
- z) **Parties:** means AMS-IX and the Customer collectively.
- aa) **Requested Delivery Date (RDD):** the date as of when the Customer requests the Access Connection and/or Services to be operational. As of that date AMS-IX starts charging for the delivered Access Connection and/or Services.
- bb) **Schedule:** a schedule (and the addenda thereto) to the MSA and the terms and conditions.
- cc) **Services:** the services as set forth in the Schedules, including but limited to Access Connection.

2. APPLICABILITY

- 2.1. These GTC shall apply to all offers, agreements, or other legal relationships pursuant to which AMS-IX is providing, or offering to provide, the Interconnection Platform and related Services to the Customer, in particular the MSA, Schedules and addenda thereto, and Order Confirmations. Amendments or supplements to the Agreement are valid only if agreed in writing and signed by both Parties. In the absence of a written agreement to the contrary between the Parties, AMS-IX rejects the applicability of all general conditions other than the GTC.

3. OBJECT

- 3.1. AMS-IX will deliver the Services and keep them available to Customer and Customer agrees to pay the Fees. The obligations and responsibilities of AMS-IX with respect to the rendered Services are stated in the related Schedule.

4. INTELLECTUAL PROPERTY

- 4.1. All Intellectual Property in the Interconnect Platform, the related Services and all generally related to the Agreement shall remain with AMS-IX or its licensors.

5. CUSTOMER'S ORGANISATIONAL SET-UP

- 5.1. Customer will appoint a Contractual Contact Person (CCP), who will act as an authorised signatory of
- 5.2. Customer.

- Customer will appoint a Technical Contact Person (TCP) who will function as contact person with respect to all technical matters relating to the Services.
- 5.3. Customer will appoint a Network Operations Centre (NOC) contact with respect to operational and emergency matters relating to the Services. Customer warrants that the NOC can be reached 24 hours per day, 7 days per week through one point of contact.
- 5.4. Customer will appoint an Administrative Contact Person (ACP) who will function as contact person with respect to all administrative and financial matters relating to the Agreement.
- 5.5. Customer will ensure only authorised persons can place orders on the AMS-IX Portal.
- 5.6. By agreeing with these GTC, Customer confirms that details with regard to contact persons appointed following this Article 5 are correct and up to date on the AMS-IX Portal, and that these contact persons have been informed that their personal data are shared with and processed by AMS-IX in order to perform the Agreement. The latest version of the AMS-IX Privacy Policy can be found at AMS-IX website.

6. RATES AND PAYMENTS

- 6.1. AMS-IX shall invoice the Fees on a monthly basis or as otherwise agreed between Parties and Customer shall pay Fees within a period of 30 days after the date of invoice-(the "Invoice Date") or as otherwise agreed between Parties.
- 6.2. All Fees will be paid in the currency indicated in the Order Confirmation.
- 6.3. The Fees are exclusive of VAT or other applicable taxes. Customer is responsible for the payment of any such taxes.
- 6.4. ~~In the event Customer fails to pay within 30 days from the Invoice Date, interest of 8% (computed on a monthly basis) can be charged on any such unpaid, undisputed amount on a monthly basis from the Invoice Date until such invoices are paid in full.~~
- 6.5. AMS-IX reserves the right to periodically re-assess and re-establish the Fees for the rendered Services, including only in the event of any change of taxes, laws, regulations or applicable third-party terms having an effect on the Fees. Upward price changes shall be made public at least 3 months prior to a change at the AMS-IX website. Downward price changes may be applied instantly.

7. TERM AND TERMINATION

- 7.1. The Agreement shall be effective as of the date of signing thereof by both Parties (the "Effective Date") and shall continue to be in force unless terminated with 3 months written notice by either Party.
- 7.2. Either Party may terminate the Agreement immediately, if the other Party commits a material breach of the Agreement and, where such breach is capable of remedy, fails to remedy the breach within 14 days of a written notice to do so.
- 7.3. Customers' failure to pay Fees due that are not reasonably in dispute is deemed a material breach of the Agreement.
- 7.4. AMS-IX may, with a reasonable notice period, suspend its performances of its obligations under the Agreement (including the provisioning of the Services) or terminate the Agreement in the event that:
- AMS-IX is directed by any competent authority to cease the access to the Interconnect Platform and/or the provision of the Services;
 - Customer's use of the rendered Services causes or is likely to cause damage as described in Article 8.2;
 - Customer does not adhere to the restrictions relating to Allowed Traffic as referred to at AMS-IX website;
 - AMS-IX is no longer able to provide access to the Interconnect Platform or render the Services as a result of a change of law, regulation or tax, or where its suppliers or partners have terminated their services; or
 - AMS-IX believes Customer's conduct is likely to result in breach of law or is otherwise prejudicial to AMSIX's interest.
- 7.5. Either Party has the right to immediately without written notice suspend its performances or its obligations under the Agreement (including the provisioning of the Services) or terminate the Agreement in the event that:



- a) The other Party shall be dissolved or liquidated, is declared bankrupt or otherwise insolvent, or must reasonably be expected to be unable to meet its obligations under the Agreement; or
 - b) A Party is the subject of a Change of Control; or
 - c) An event of Force Majeure occurs, which event of Force Majeure continues for 30 business days after the receipt of a written notice by the other Party.
- 7.6. Any termination is effective only for the future and entails no obligation for the Parties to return or refund any benefits received until the moment of termination. If applicable, upon termination of the Agreement AMS-IX will immediately terminate the availability for Customer of the AMS-IX IP-address(es) Customer was assigned under the Agreement.

8. USE AND LIMITATIONS

- 8.1. Customer has the non-exclusive right to use the Services for its regular business purposes.
- 8.2. Customer warrants that its use of the Services does not cause or is likely to cause any damage, or is in any other way harmful to i) the Interconnect Platform, ii) AMS-IX, iii) the AMS-IX Association, iv) the regular operation, availability or functionality of the physical interface(s) and/or the Colocation, v) the traffic exchanged to other customers. Specifically, the Customer will adhere to the restrictions relating to the Allowed Traffic Rules as referred to in: <https://www.ams-ix.net/ams/documentation/allowed-traffic>.
- 8.3. Customer agrees to implement any reasonable measures that AMS-IX may propose in order to prevent or repair such damage or harm as described in Article 8.2.
- 8.4. AMS-IX reserves the right to immediately suspend and eventually discontinue Customer's Services if deemed necessary by AMS-IX's NOC in the event that Customer is in breach of Article 8.2.
AMS-IX shall use all reasonable care, skill, and diligence to ensure that the Interconnect Platform and Services function in accordance with the features in the Schedules and on the AMS-IX website as established and adapted from time-to-time by AMS-IX.

9. LIABILITY

- 9.1. Any liability of AMS-IX towards Customer for compensation of damages resulting from AMS-IX's performance or non-performance of the Agreement is at all times limited to the total amount of Fees paid by Customer to AMSIX under the Agreement over the 12 months preceding the event (or, in case of a series of events: the occurrence of the first events of such a series) that caused such damages.
- 9.2. Parties will not be liable towards one another for compensation of indirect or consequential damages, including but not limited to lost profits, damages consisting of or resulting from loss of data or information and loss due to business interruption.
- 9.3. The limitation as set forth in Article 9.1 above does not apply to damages that are caused by gross negligence or by wilful misconduct.
- 9.4. Customer shall indemnify AMS-IX and the AMS-IX Association and hold them harmless from any and all damages and costs they might suffer or incur as a result of a breach by Customer of the Allowed Traffic Rules (as referred to at AMS-IX website) or of any claim of a third party that information exchanged on the Interconnect Platform through the Services infringes rights of such third party.

10. FORCE MAJEURE

- 10.1. AMS-IX is not liable to fulfil any obligations arising from the Agreement if this is caused by Force Majeure. The term Force Majeure means anything which occurs beyond the reasonable control of AMS-IX, including, but not limited to: fire, (the threat of) war, (the threat of) terrorism, unofficial or organised strikes, blockades, riots or other disturbances of the peace, fuel shortage, energy shortage, power outages, weather conditions, natural disasters, including floods, lightning impact and earthquakes, epidemics, quarantine measures, restrictions on the granting of permits and failure by sub-suppliers to fulfil their obligations.

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11. CONFIDENTIALITY AND PRIVACY

- 11.1. Neither Party shall use Confidential Information received from the other Party for purposes other than in direct relation with the Agreement. Either Party shall treat the Confidential Information received from the other Party with at least the same degree of care as it would use in respect of its own Confidential Information of similar importance, but in any event a reasonable level of care. In particular, the Party receiving Confidential Information shall not disclose, publish, disseminate, or make accessible such Confidential Information, in whole or in part, in any way or form, to third parties.
- 11.2. The restrictions and obligations in this Article 11 shall not apply to the Confidential Information disclosed by a Party, which:
- a) Is generally available to the public other than as a result of a disclosure by the Party or its representatives receiving such Confidential Information (or its representatives); or
 - b) Was received by the Party receiving such Confidential Information from a third party and not indirectly from the Party disclosing such information in violation of any obligation of secrecy or non-use; or
 - c) Was in the possession of the Party receiving Confidential Information prior to disclosure or is developed independently from such Confidential Information, as is shown by competent evidence.
- 11.3. In case Confidential Information is required to be disclosed by a Party by virtue of a court order or statutory duty, such Party shall be allowed to do so, provided that it shall to the extent legally possible without delay inform the Party disclosing such Confidential Information in writing of receipt of such order or duty and enable that Party reasonably to seek protection against such order or duty.
- 11.4. Both Parties will comply with applicable data protection legislation when it comes to the processing of personal data as provided by the other Party.
- 11.5. Customer explicitly consents to personal data relating to Customer's employees being recorded in the AMS-IX Portal, which system is necessary to manage the Agreement between the Customer and AMS-IX. The latest version of the AMS-IX Privacy Policy can be found at <https://www.ams-ix.net/ams/documentation/privacypolicy>.

12. GOVERNING LAW AND DISPUTES

- 12.1. The Agreement shall be governed by the laws of the Netherlands. Any dispute with regard thereto will be brought exclusively before the competent court of Amsterdam, The Netherlands.
- 12.2. The Agreement contains all the terms which the Parties have agreed in relation to the subject matter thereof and supersedes any prior written or oral agreements, representations or understandings between the Parties relating to such subject matter.

13. MISCELLANEOUS

- 13.1. The amended GTC will come into effect as soon as the Customer is notified thereof. In case the Customer does not object to the amended provision within statutory period of 60 days, such amendments will be effective. Such notification will be sent to one or more duly authorised representatives (CCP) and the amended GTC will be posted on the website of AMS-IX.
- 13.2. AMS-IX may assign or subcontract its rights under the Agreement.
- 13.3. Customer is not entitled to assign and/or sublicense any of its rights or obligations under the Agreement without AMS-IX's prior written approval.
- 13.4. To the extent legally permissible, Parties hereby agree that the electronic signing of the Agreement by digital means, such as by DocuSign or any comparable tool shall qualify as sufficiently reliable.
- 13.5. The provisions of the Agreement relating to confidentiality, warranty claims, limitation of liability, indemnities, governing law and dispute resolution, and other provisions that expressly or by their nature are intended to continue to have effect, shall survive termination or expiration of the Agreement.
- 13.6. The English text of the Agreement is the only valid and legally binding text thereof. Any translation of such documents, whether or not made or provided by AMS-IX, is solely for the convenience of the Customer.





ANNEX 1: SERVICE LEVEL AGREEMENT (SLA)

1. LIMITATIONS AND SCOPE

- 7.4. This SLA is only valid if the 95th-percentile peak load on the applicable Access Connection does not exceed 80% of the maximum capacity of the relevant Platform Access Port(s) in a given month.
- 7.5. This SLA is only applicable to the Access Connection, and only as long as the Customer is in compliance with all the terms and conditions as set out in the MSA, GTC and this Schedule.
- 7.6. This SLA is only applicable to Access Connections in datacentres certified by AMS-IX as listed on the AMS-IX website.
- 7.7. Border Gateway Protocol routing issues are specifically excluded from this SLA.
- 7.8. This SLA is applicable only once it has been ordered at additional charge and specified in the Service Confirmation.

2. AVAILABILITY OF THE SERVICE

1. AMS-IX applies all commercially reasonable effort to ensure an availability of 99.99%. AMS-IX defines availability as the amount of time per month (in percentages) that the relevant AMS-IX infrastructure and the Services provided under this Schedule are available to the Customer. Unavailability is further specified in article 2.2 and article 2.3 of this SLA.

To calculate availability the following formula is used: $P = \frac{A-B-C}{A-B} * 100$

Where:

- A = Number of minutes in a month
 - B = Sum of all time (in minutes) in a month during which the Service was unavailable due to announced maintenance
 - C = Sum of time (in minutes) in a month during which the Service was unavailable due to other reasons than announced maintenance
 - P = Availability percentage
2. The Service provided under this Access Connection Schedule may only be considered unavailable in light of this SLA when:
 - a) the Access Connection to the AMS-IX infrastructure is not operational due to a problem within the responsibility sphere of AMS-IX;
 - b) the Access Connection to the AMS-IX infrastructure is operational but 5% or more of the other Customer's routers in the same Service LAN are unreachable due to a problem within the responsibility sphere of AMS-IX; or
 - c) the Access Connection consists of a LAG and one or more of the individual Platform Access Ports in this LAG are down due to a problem within the responsibility sphere of AMS-IX and the average traffic load on the remaining Platform Access Ports exceeds 80%;and the conditions of article 3.3.(a) or 3.3.(b) of this SLA have been met.
 3. The unavailability period starts when:
 - a) an authorized Customer representative contacts the AMS-IX NOC (+31 20 5200 300) to open an SLA-case, which leads a mutually agreed upon trouble ticket; or
 - b) a trouble ticket has been opened by the AMS-IX NOC after a Customer-affecting problem causing unavailability as meant in this SLA is detected. The affected Customers will be mentioned in the trouble ticket.



4. The unavailability ends when the trouble ticket is closed in mutual agreement in case of a), providing the Customer's 24 hrs availability, or by the AMS-IX NOC in case of b).
5. Exceptions to the unavailability (C in the formula) are:
 - a) Photonic cross-connect swaps in the AMS-IX infrastructure and relating to 10GE ports below 200 milliseconds;
 - b) Prolonged swap time after a photonic cross-connect swap due to certain conditions. In case such a condition exists, the AMS-IX NOC, while testing the Customer's port(s), will notify the Customer about this. Examples are:
 - i. the Customer uses LACP for port aggregation; or
 - ii. the Customer is connected behind a DWDM infrastructure on which the swap is not correctly propagated.
 - c) Outages needed for changes to the Services requested by the Customer or otherwise agreed between the Parties;
 - d) Outage periods reported by the Customer in which no fault is observed or confirmed by AMS-IX; and
 - e) Outages due to force majeure.

3. KPIS

1. The AMS-IX infrastructure is considered degraded if one of the measured Key Performance Indicators ("KPIs") regarding the connection between Customer and another customer of AMS-IX connected to the same Service is experienced at a rate larger than the aimed for values below and a trouble ticket is created in accordance with article 3.3 of this SLA. The monitored and measured KPI and their target values are listed in the table below.

KPI	Target value	Description
Packet Loss	<0.05%	The average amount of packets lost between two probes in a 24-hour period ;
One Way Delay	<500 micro-seconds	The average one-way packet delay per hour between two probes in a 24-hour period
One Way Delay variation	<100 micro-seconds	The average one-way packet delay per hour between two probes in a 24-hour period

2. The KPIs are continuously monitored and measured by "probes" used in the monitoring platform. Namely, Accadian MetroNID in the event of a GE Platform Access Port and MetroNODE in the event of a 10GE Platform Access Port, both of which measure the KPIs as specified in the table above.

Measurements taken by the probes are indicators of the performance and are expected to be similar, but not necessarily the same, as those experienced and measured by Customer.

The measured KPI's are reported at <https://stats.ams-ix.net/rt-stats.html>

The performance indicators as measured by AMS-IX are limited to the AMS-IX infrastructure and do not include the Customer Platform Access Ports. To compare the KPI's experienced by Customer with the KPI's measured and published by AMS-IX the 95th-percentile peak load on the customer connection should not exceed 80% of the maximum capacity.

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If the measurements of the Customer deviate from the published performance indicators and exceeds the numbers in the agreed SLA, the Customer is entitled to open an SLA-case with the AMS-IX NOC as described in article 3.3.(a) of this SLA.

3. Degradation of the Service is considered to have taken place if:
 - a) an authorized customer representative contacts the AMS-IX NOC (+31 20 5200 300) to open an SLA-case, which leads to a trouble ticket in mutual agreement; or
 - b) a Trouble Ticket has been opened by the AMS-IX NOC after a problem affecting the Customer is detected. The affected customers will be mentioned in the trouble ticket.
4. The degradation of the Service is considered to have ended when the trouble ticket is closed in mutual agreement in case of a) or by the NOC in case of b) (providing 24 hrs Customer availability).

4. Scheduled Maintenance

1. Scheduled maintenance is a necessary element of network operations and therefore not counted as unavailability as referred to under article 2 of this SLA.
2. To make sure that scheduled maintenance announcements are seen by the Customer, it is the responsibility of the Customer to make sure the relevant contact details are registered and known to AMS-IX.
3. In some cases, Emergency Scheduled Maintenance as defined in article 5 of this Schedule may be required. It may not be possible to announce the Emergency Scheduled Maintenance in advance.

5. SLA Reporting

1. Reporting on the measured availability and KPIs will be done in real time by AMS-IX at <https://stats.ams-ix.net/rt-stats.html>
2. An individual monthly SLA report ("SLA Report") will be made available through the Customer specific my.ams-ix.net website within 10 working days after the end of the relevant month. Each month the Customer will be notified of the posting of the report. The Customer may accept or reject the report. If the Customer has not rejected the report within 10 working days after notification the SLA Report will be accepted automatically and assumed to be accurate. After an SLA Report has been accepted, no more service credits will be awarded with respect to period to which the report pertains. In case of rejection of the report, the Customer may start the dispute resolution process as described in article 7 of this SLA.

6. Service Credit Scheme

1. In the event that (i) the desired availability as described under article 2.1 of this SLA, (ii) a KPI target value as described under article 3.1 of this SLA, or (iii) a target time for delivery, implementation or change as described under article 6.4 of this SLA is not met, the Customer can request service credits from AMS-IX relating to the relevant Access Connection as described in this article. Service credits need to be requested within 10 days following the SLA Report. AMS-IX will process the service credit request within three (3) working days and report back to the Customer.
2. Not more than 100% of the monthly Fee paid for the Access Connection Service is credited in any given month. In case of several incidents in a particular month, AMS-IX will aggregate the requested service credits. A combination request of Availability and Performance service credits for one incident is not accepted; Service is either unavailable or degraded, not both at the same time.
3. In case a service credit request is submitted, Customer is required to pay outstanding and future invoices as they are submitted without anticipating the service credit. Once the service credits are accepted and/or disputes settled, AMS-IX will offset any service credit on the next following invoice.
4. In the event the initial delivery and implementation or changes of the Service exceeds the target times listed, service credits may be requested by the Customer as described in the table below. Any process that is delayed

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due to events outside AMS-IX control or due to Customer's or a third party's actions, will not lead to eligibility for service credits. If the Customer requests changes to the initial order, the provided target times shall be measured again from that date.

Type	Measure	Monthly Service Credit
Initial port	Over 5 working days	50% of Access Connection Service Fees
	Over 10 working days	100% of Access Connection Service Fees
Non-contractual changes impact	Over 3 working days	50% of Access Connection Service Fees
	Over 6 working days	100% of Access Connection Service Fees
Contractual changes impact	Over 5 working days	50% of Access Connection Service Fees.
	Over 10 working days	50% of Access Connection Service Fees

Requested and agreed service credits for initial service delivery will be applied to the first invoice the Customer receives. In case of Fees waived for the first month of service no credits shall apply.

Requested and agreed service credits regarding changes shall be applied on the next scheduled invoice Customer receives.

5. In the event the Customer experiences Service availability below the target as described in article 2.1 of this SLA during a given month, service credits may be requested by the Customer as described in the table below.

Monthly Calculated Availability (P)	Approximate Monthly Minutes downtime*	Monthly Service Credit
$P \geq 99.99\%$	0-4	0% of Access Connection Service Fees
$99.99\% > P \geq 99.95\%$	4-22	50% of Access Connection Service Fees
$P < 99.95\%$	> 22	100% of Access Connection Service Fees

* depends on actual number of days in the month.

6. In the event the KPI target values as specified in article 3.1 of this SLA are exceeded, leading to a degradation of the Service as described in that article 3, service credits may be requested by the Customer as described in the table below.

KPI	Measured value	Monthly Service Credit
Packet Loss	$0.05\% \leq \% \text{ value} \leq 0.1\%$	25%
	$\% \text{ value} > 0.1\%$	50%
One Way Delay	$500 \mu s \leq \text{delay value} \leq 1000 \mu s$	25%
	$\text{delay value} > 1000 \mu s$	50%
One Way Delay variation	$100 \mu s \leq \text{jitter value} \leq 200 \mu s$	25%
	$\text{jitter value} > 200 \mu s$	50%

7. This service credits scheme as set out in this article 6 of this SLA, constitutes Customer's sole remedy with respect to late delivery, unavailability, underperformance or degradation of the Services rendered by AMS-IX under this Access Connection Schedule.

7. DISPUTE RESOLUTION:

1. The Customer can start a procedure to dispute the SLA Report (including individual cases) by filing a dispute through the individual Customer environment on www.ams-ix.me.
2. The dispute must be filed within 30 days following the SLA Report to which it pertains, and may only be filed on the condition that the Customer has rejected the SLA Report within 10 working days of its publication, in accordance with article 5 of this SLA.
3. No service credits will be awarded in relation to disputes that were not filed in accordance with article 7.2 of this SLA.
4. AMS-IX will process the filed dispute and conduct a thorough investigation. AMS-IX will then inform the Customer of its findings and issue any service credits if applicable. In the event the Customer is not satisfied with the solution offered by AMS-IX, the dispute will be escalated to the AMS-IX management team in order to attempt to reach a mutually acceptable solution. If a mutually acceptable solution cannot be found, no service credits will be awarded.



Consiglio Nazionale delle Ricerche

Istituto di Informatica e telematica - CNR

Il Direttore

(Dott. Marco Conti)

SCHEDULE 1: ACCESS CONNECTION

1. GENERAL PROVISIONS

- 1.1. This Access Connection schedule ("**Schedule**") is an attachment to the Master Services Agreement between the Parties (**MSA**). The MSA and the General Terms and Conditions referred to therein (**GTC**) apply to this Schedule.
- 1.2. In the event of any inconsistencies between this Schedule and the provisions of the MSA and the GTC, the MSA and the GTC shall prevail, unless explicitly otherwise stated in the Order Confirmation.
- 1.3. Definitions used in this Schedule shall have the same meaning as those included in the GTC, unless explicitly otherwise stated herein.

2. ACCESS CONNECTION

- 2.1. Access Connection enables Customer (such as Internet Service Providers (ISPs), carriers, content providers, enterprises, etc.) to access the AMS-IX Interconnect Platform and use various interconnection services. One Access Connection consists of one or more physical interfaces. When Access Connection consist of more than one physical interface, it is referred to as a Link Aggregation Group ("**LAG**") configuration.

3. SERVICES AND FEATURES

- 3.1. The Access Connection, as part of which the physical interface (or the individual members of a LAG) is/are provided, extend up until the AMS-IX patch panel. This patch panel is the demarcation point (or as otherwise stated in Service Schedule). between the Customer's and AMS-IX's responsibilities The responsibility for the (LAG) connection between the Customer's router to the AMS-IX patch panel is with the Customer. The responsibility for the (LAG) connection up to and including the local AMS-IX patch panel is with AMS-IX. In case of a LAG connection, not all connections of the LAG necessarily 'terminate' on the same patch panel. Cabling and specifications, and detailed features of the Access Connection (which may be amended from time to time by AMS-IX) are further specified at AMS-IX website.
- 3.2. AMS-IX offers the option to extend the regular Access Connection with a Service Level Agreement ("**SLA**") for an additional fee. The SLA is applicable to the availability of the Access Connection to and the performance of the AMS-IX infrastructure. The SLA, which may be amended from time to time by AMS-IX, can be found in Annex 1 to this Schedule.

4. SERVICE PROVISIONING

- 4.1. The provisioning of an Access Connection is performed maximally 30 days prior to the Requested Delivery Date (RDD) specified by the Customer in AMS-IX Portal and may take a maximum of five (5) working days. Upon first provisioning of service, the Access Connection will be placed in a quarantine VLAN. This allows the Customer to physically install/configure their equipment, finalise connectivity and cabling arrangements with the colocation or layer-2 service provider, and verify basic (L1/L2 and "ping") connectivity to the AMS-IX infrastructure. At the same time, this allows AMS-IX NOC to verify that the Customer's equipment is configured according to the AMS-IX configuration rules as set forth (in article 8.2) of the GTC. Once this is concluded successfully, the Access Connection is operational.

5. QUALITY STATEMENT

- 5.1. AMS-IX aims to have a network availability of at least 99.99% but cannot make any guarantees considering the availability, unless explicitly agreed in the SLA.
- 5.2. To ensure the required quality of service and to facilitate continuous growth, the AMS-IX platform is often maintained on a day-to-day basis and upgraded regularly. AMS-IX provides all commercially reasonable efforts to ensure such maintenances and upgrades occur exclusively during the scheduled maintenance. AMS-IX will apply all commercially reasonable efforts to ensure that scheduled maintenance is announced to the Customer by way of the relevant distribution lists at least 72 hours before its occurrence. In addition to the scheduled maintenance, it may occur that urgency of a maintenance cannot reasonable be postponed, for example when hardware or software malfunctioning is detected by AMS-IX. In such cases the maintenance work may involve so called "Emergency Scheduled Maintenance", that may, in some cases, not be announced in advance.



- 5.3. This quality statement does not have penalty or service credit schemes associated with it. SLA that includes service penalties can be ordered at an additional charge.
6. PURCHASE OF THE SERVICE, FEES AND PAYMENT
- 6.1. The Customer herewith purchases, and AMS-IX offers the Access Connection on the terms and conditions including Fees, set forth in the Order Confirmation.
7. TERM AND TERMINATION
- 7.1. This Schedule shall be effective as of the date of acceptance thereof by the Customer and shall continue to be in force for an undetermined period of time (hereinafter the Schedule 1 Term), subject to the conditions stated in Article 7.3.
- 7.2. This Schedule shall be terminated by either Party:
- a) by giving written notice at any time; or
 - b) termination of the MSA, whichever comes earlier; and
- 7.3. If the Order Confirmation holds different term and termination periods, those shall take precedence.




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SCHEDULE 2: PEERING

1. GENERAL PROVISIONS

- 1.1. This Peering schedule ("**Schedule**") is an attachment to the Master Services Agreement between Parties (**MSA**). The MSA and the General Terms and Conditions referred to therein (**GTC**) apply to this Schedule.
- 1.2. In the event of any inconsistencies between this Schedule and the provisions of the MSA and the GTC, the MSA and the GTC shall prevail, unless explicitly otherwise stated in the Service Confirmation.
- 1.3. Definitions used in this Schedule shall have the same meaning as those included in the GTC, unless explicitly otherwise stated herein.

2. PEERING

The AMS-IX Peering Service support exchange of various types of traffic, as described below.

SERVICES AND FEATURES

- 2.1. 'Internet Peering' enables Customers (such as Internet Service Providers (ISPs), carriers, content providers, enterprises, etc.) to interconnect and exchange traffic with multiple networks in a public VLAN.
- 2.2. 'Mobile Peering' is an open interconnection solution that allows mobile providers and others to securely peer their global roaming data. The Mobile Peering services include but are not limited to:
 - a) 'GRX Service', which facilitates the exchange of mobile roaming data (3G/4G/5G)
 - b) 'Inter-IPX Service', which enables exchange of mobile IPX traffic using service communities like: IPX Diameter, IPX transport and GRX. The Inter-IPX Service is covered by a dedicated AMS-IX Inter-IPX Service Level Agreement ("**SLA**"), which may be amended from time to time by AMS-IX and can be found in Annex 1 to this Schedule.
- 2.3. Detailed features of the Services (which may be amended from time to time by AMS-IX) can be found on the AMS-IX website.

3. PURCHASE OF THE SERVICE, FEES AND PAYMENT

- 3.1. The Customer herewith purchases, and AMS-IX offers Peering Services on the terms and conditions including Fees, set forth in the Order Confirmation.
- 3.2. AMS-IX will not offer or keep Peering Services available to the Customer, if Customer does not have at its disposal an Autonomous System Number (ASN) assigned by an official assigning authority.
- 3.3. A bandwidth limit applies to Services purchased under this Schedule. When Customer exceeds the purchased bandwidth, AMS-IX is entitled to automatically upgrade the Customer's Service bandwidth and increase the corresponding Fees, according to the usage, without prior permission of the Customer being required. AMS-IX will inform Customer if this occurs.

4. TERM AND TERMINATION

- 4.1. This Schedule shall be effective as of the date of acceptance thereof by the Customer and shall continue to be in force for an undetermined period of time (hereinafter the Schedule 2 Term), subject to the conditions stated in Article 4.3.
- 4.2. This Schedule shall be terminated by either Party:
 - a) by giving written notice at any time; or
 - b) termination of the MSA, whichever comes earlier; and
- 4.3. If the Order Confirmation holds different term and termination periods, those shall take precedence.

A handwritten signature in blue ink, appearing to be 'Ric'.



ANNEX 1: AMS-IX INTER-IPX SERVICE LEVEL AGREEMENT

1. LIMITATIONS AND SCOPE

1. This SLA is only valid if the 95th-percentile peak load on one of the two redundant regular AMS-IX Connections as described in chapter 3 of the applicable Customer Inter-IPX Connection does not exceed 80% of its maximum capacity in a given month.
2. This SLA is only applicable to the Customer Inter-IPX Connection as long as the Customer is in compliance with all the terms and conditions as set out in the MSA, GTC and this Schedule.
3. This SLA is only applicable to the Customer Inter-IPX Connections in datacenters certified by AMS-IX as listed on the AMS-IX website.
4. Border Gateway Protocol routing issues are specifically excluded from this SLA.

2. AVAILABILITY OF THE SERVICE

1. AMS-IX applies all commercially reasonable efforts to ensure an availability of 99.995% per month. AMS-IX defines availability as the amount of time per month (in percentages) that the AMS-IX infrastructure relevant to the Inter-IPX Services is available to the Customer. Unavailability is further specified in article 2.2 and article 2.3 of this SLA.

To calculate availability the following formula is used: $P = \frac{A-B-C}{A-B} * 100$

Where:

- A = Number of minutes in a month
 - $B = \sum_{i=1}^n B_i$ Sum of all time (in minutes) in a month during which the Inter-IPX Services were unavailable due to announced maintenance,
 - $C = \sum_{j=1}^m C_j$ Sum of all time (in minutes) in a month during which the Inter-IPX Services were unavailable due to other reasons than announced maintenance.
 - P = Availability percentage
2. The Inter-IPX Services provided under this Schedule may only be considered unavailable in light of this SLA when:
 - a) The Inter-IPX Connection of the Customer to the AMS-IX Infrastructure is not operational due to a problem within the responsibility sphere of AMS-IX (see fig. 1 and 2)
 - b) The Inter-IPX Connection of the Customer to the AMS-IX Infrastructure is operational but 5% or more of the other Customer's routers in the same Inter-IPX LAN are unreachable
 - c) If the Inter-IPX Connection of the Customer consists of a so called LAG and one or more of the individual links in this LAG are down due to a problem within the responsibility sphere of AMS-IX and the average traffic load on the remaining links exceeds 80%.
 3. The unavailability period starts when:
 - a) An authorized Customer representative contacts the AMS-IX NOC (+31 20 5200 300) to open an SLA-case, which leads to a mutually agreed upon trouble ticket; or
 - b) A trouble ticket has been opened by the AMS-IX NOC after a Customer-affecting problem is detected. The affected customers will be mentioned in the trouble ticket.
 4. The unavailability ends when the trouble ticket is closed in mutual agreement in case of a), providing the Customer 24 hrs availability, or by the AMS-IX NOC in case of b).
 5. Exceptions to the unavailability (C in the formula) are:
 - a) Photonic cross-connect swaps in the AMS-IX Infrastructure and relating to 10GE ports below 200 milli-seconds;
 - b) Prolonged swap time after a photonic cross-connect swap due to certain conditions. In case such a condition exists, the AMS-IX NOC while testing the Customer's port(s), will notify the Customer about this. Examples are:
 - i. Customer uses LACP for port aggregation; or

- ii. in case Customer is connected behind a DWDM infrastructure on which the swap is not correctly propagated.
- c) Outages needed for changes to the Services requested by the Customer or otherwise agreed between the Parties.
- d) Outage periods reported by the Customer in which no fault is observed or confirmed by AMS-IX; and
- e) Outages due to force majeure.

3. KPIS

1. The AMS-IX infrastructure is considered degraded if one of the measured Key Performance Indicators ("KPIs") between the Customer and another Inter-IPX customer is experienced at a rate larger than the aimed for values below and a trouble ticket is created in accordance with article 3.3 of this SLA. The monitored and measured KPIs and their target values are listed in the table below.

KPI	Target value	Description
Packet Loss	<0.05%	The average amount of packets lost between two probes in a 24-hour period
One Way Delay	<500 micro-seconds	The average one-way packet delay per hour between two probes in a 24-hour period
One Way Delay variation	<100 micro-seconds	The average one-way packet delay per hour between two probes in a 24-hour period

2. The defined KPI's support the highest Quality of Service Type or Traffic Class in the associated GSMA documentation (GSMA IREG PRD IR.34), namely Traffic Class Conversational. The calculation of the various KPI parameters follows the definitions as described in GSMA IPX PCI document PTG-DL017.

The KPIs are continuously monitored and measured by "probes" used in the monitoring platform. Namely, Accadian MetroNID in the event of a GE Platform Access Port and MetroNODE in the event of a 10GE Platform Access Port, both of which measure the KPIs as specified in the table above.

These measurements taken by the probes are indicators of the performance and are expected to be similar, but not necessarily the same, as experienced by Customer.

The measured KPI's are reported at <https://stats.ams-ix.net/rt-stats.html>

The performance indicators as measured by AMS-IX are limited to the AMS-IX Infrastructure and do not include the Customer links. To compare the KPI's experienced by the Customer with the KPI's measured and published by AMS-IX the 95th-percentile peak load on the individual regular connections forming the Customer Inter-IPX Connection should not exceed 80% of the maximum capacity.

If the measurements of Customer with regard to its Inter-IPX Services deviates from the published performance indicators and exceeds the numbers in the agreed SLA, Customer is entitled to open an SLA-case with the AMS-IX NOC, as described in article 3.3.(a) of this SLA.

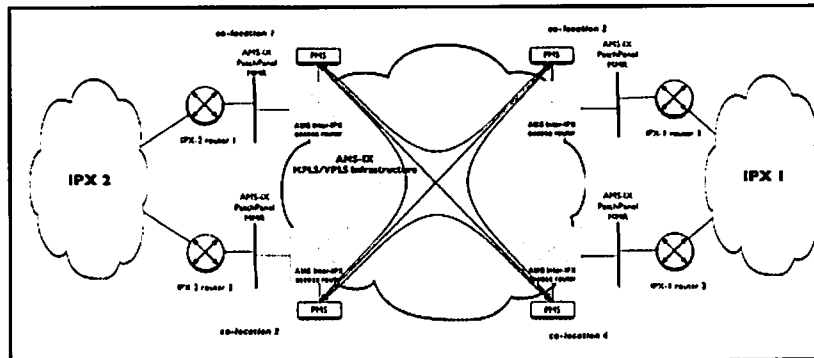


Figure 1: Inter-IPX connections and probe set-up in the platform

Figure 1 shows the AMS-IX access routers, each located in a different AMS-IX location. Connected to each of the access routers is a "probe", as mentioned above, which measures the performance of connections over the AMS-IX Infrastructure towards the other probes, resulting in the KPI values.

3. Degradation of the Inter-IPX Service is considered to have taken place if:
 - a) an authorized customer representative contacts the AMS-IX NOC (+31 20 5200 300) to open an SLA-case, which leads to a trouble ticket in mutual agreement; or
 - b) a trouble ticket has been opened by the AMS-IX NOC after a problem affecting the Customer's Inter-IPX Service is detected. The effected customers will be mentioned in the trouble ticket.
4. The degradation of the Inter-IPX Service ends when the trouble ticket is closed in mutual agreement in case of a) or by the NOC in case of b) (providing 24 hrs Customer availability).

4. SCHEDULED MAINTENANCE

1. Scheduled maintenance is a necessary element of network operations and therefore not counted as unavailability as referred to under article 2 of this SLA.
2. AMS-IX NOC will announce scheduled maintenance at least 72 hours in advance by e-mail to the relevant technical distribution lists. For example, these are tech-l@ams-ix.net for the Internet Peering LAN, grx-tech@ams-ix.net for the GRX peering LAN and ipx-tech@ams-ix.net for the IPX peering LAN. The notification will include at least the following information:
 - Start date and time of the maintenance
 - Expected end date and time of the maintenance
 - Expected impact on availability and AMS-IX Infrastructure performance
 - Impacted customers
3. Scheduled maintenance is confined to the following periods:
 - Monday to Friday between 04.00 CET and 06.00 CET when a service interruption for any customer connection is expected
 - Monday to Friday between 00.00 CET and 06.00 CET otherwise
 - In rare cases where scheduled maintenance with potential service interruption needs longer time windows it will be announced at least 2 weeks in advance.
4. To make sure that scheduled maintenance announcements are seen by the Customer, it is the responsibility of the Customer to make sure the relevant contact details are registered and known to AMS-IX.



5. SLA REPORTING

1. Reporting on the measured availability and KPIs will be done real time by AMS-IX at <https://stats.ams-ix.net/r1-stats.html>
2. An individual monthly SLA report ("SLA Report") will be made available through the Customer specific my.ams-ix.net website within 10 working days after the end of the relevant month. Each month the Customer will be notified of the posting of the report. The Customer may accept or reject the report. If the Customer has not rejected the report within 10 working days after notification, the report will be accepted automatically and assumed to be accurate. After a report has been accepted no more service credits will be awarded with respect to the period to which the SLA Report pertains. In case of rejection of the report, the Customer may start the dispute resolution process as described in article 8 of this SLA

6. CASES, TROUBLE TICKETS AND ESCALATION

1. The AMS-IX NOC actively monitors the AMS-IX Infrastructure 24 hours/day, 7 days/week. SLA Customers will report outages via telephone (+31 20 5200 300) to start an SLA-case. The NOC will then open a trouble ticket if it can confirm the unavailability or degradation in question.
2. When a trouble ticket is opened, the AMS-IX NOC assigns an engineer to resolve the problem. Customer is kept up to date of case resolution by email. A trouble ticket opened for an individual Customer will not be closed without the Customer's consent (providing that the Customer is reachable via its designated contacts as set forth in article 4.3 in the GTC). Upon resolution of the trouble ticket the NOC will close the SLA-case.
3. In case the Customer needs to escalate a problem, the requests are relayed to the Chief Technical Officer of AMS-IX.
4. All SLA-cases and trouble tickets can be reviewed through the customer portal on the AMS-IX website https://my.ams-ix.net/trouble_tickets. In many cases incidents with a larger impact are discussed on our interactive grxtech@ams-ix.net and ipxtech@ams-ix.net mailing lists to which the AMS-IX NOC and the Customer's technical contact(s) are subscribed.

7. SERVICE CREDIT SCHEME

1. In the event that (i) the desired availability as described under article 2.1 of this SLA, (ii) a KPI target value as described under article 3.1 of this SLA, or (iii) a target time for delivery, implementation or change as described under article 6.4 of this SLA is not met, the Customer can request service credits from AMS-IX relating to the applicable Customer Connection. Service credits need to be requested through the customer environment in my.ams-ix.net within 10 days following the SLA Report. AMS-IX will process the service credit request within three (3) working days and report back to Customer.
2. Not more than 100% of the monthly Fee paid for the AMS-IX Peering Services is credited in any given month. In case of several incidents in a particular month, AMS-IX will aggregate the requested service credits. A combination request of Availability and Performance service credits for one incident is not accepted, the Service is either unavailable or degraded, not both at the same time.
3. In case a service credit request is submitted, Customer is required to pay outstanding and future invoices as they are submitted without anticipating the service credit. Once the service credits are accepted and/or disputes settled AMS-IX will offset any service credit on the next following invoice.
4. In the event the initial delivery and implementation or changes of the Inter-IPX Services exceeds the target times listed, service credits may be requested by the Customer as described in the table below. Any process that is delayed due to events outside AMS-IX control or due to the Customer's or a third party's actions will not lead to eligibility for service credits. If the Customer requests changes to the initial order the provided target times shall be measured again from that date.

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Type	Measure	Monthly Service Credit
Initial port	Over 5 working days	50%
	Over 10 working days	100%
Non-contractual impact changes	Over 3 working days	50%
	Over 6 working days	100%
Contractual impact changes		As above at ports.

Requested and agreed service credits for initial service delivery will be applied to the first invoice the Customer receives. In case of Fees waived for the first month of service no credits shall apply.

Requested and agreed service credits regarding changes shall be applied on the next scheduled invoice the Customer receives.

5. In the event the Customer experiences an Inter-IPX Service availability below the targeted availability as described in article 2.1 of this SLA during a given month, Customer is entitled to request a service credit according to the table below.

Monthly Calculated Availability (P)	Approximate Monthly Minutes downtime*	Monthly Service Credit
$P \geq 99.995\%$	0-2.2	0%
$99.995\% > P \geq 99.95\%$	2.2-22	50%
$P < 99.95\%$	>22	100%

* depends on actual number of days in the month.

6. In the event the KPI target values as specified in article 3.1 of this SLA are exceeded, leading to a degradation of the Inter-IPX Service as described in that article 3, service credits may be requested by the Customer as described in the table below.

KPI	Measured value	Monthly Service Credit
Packet Loss	$0.05\% \leq \% \text{ value} \leq 0.1\%$	25%
	$\% \text{ value} > 0.1\%$	50%
One Way Delay	$500 \mu s \leq \text{delay value} \leq 1000 \mu s$	25%
	$\text{delay value} > 1000 \mu s$	50%
One Way Delay variation	$100 \mu s \leq \text{jitter value} \leq 200 \mu s$	25%
	$\text{jitter value} > 200 \mu s$	50%

7. service credits scheme as set out in this paragraph 10 constitutes the Customer's sole remedy with respect to late delivery, unavailability or underperformance of the Inter-IPX Services rendered by AMS-IX.

8. DISPUTE RESOLUTION

- The Customer can start a procedure to dispute the SLA Report (including individual cases) by filing a dispute through the individual Customer environment on www.ams-ix.me.
- The dispute must be filed within 30 days following the SLA Report to which it pertains, and may only be filed on the condition that the Customer has rejected the SLA Report within 10 working days of its publication, in accordance with article 5 of this SLA.
- No service credits will be awarded in relation to disputes that were not filed in accordance with article 7.2 of this SLA.
- AMS-IX will process the filed dispute and conduct a thorough investigation. AMS-IX will then inform the Customer of its findings and issue any service credits if applicable. In the event the Customer is not satisfied with the solution offered by AMS-IX, the dispute will be escalated to the AMS-IX management team in order to attempt to reach a mutually acceptable solution. If a mutually acceptable solution cannot be found, no service credits will be awarded.



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