

Direct Access Reference Offer

All capitalised terms shall have the meaning ascribed in the Direct Access Agreement.

Recital	<p>The Parties have expressed their wish to enter into a Direct Access Agreement for the provision by Vodafone of Services to enable Roaming Customers of the Access Seeker to gain access to regulated roaming mobile telecommunication services in the geographic areas where Vodafone [Operator] operates a public mobile network.</p> <p>Vodafone shall meet all reasonable requests for wholesale roaming access according to Article 3 of the Regulation (EU) 531/2012</p>
Scope	<p>Under the Direct Access Agreement, Vodafone shall establish IR between the Access Seeker and the Vodafone Participating Companies. When providing services, fulfilling obligations or otherwise performing the Direct Access Agreement, the Parties shall do so in accordance with:</p> <ul style="list-style-type: none"> • Relevant Technical Specifications • All binding GSM Association Permanent Reference Documents, and • Those non-binding GSM Association Permanent Reference Documents which are agreed by the Parties and specifically set out in the Annexes of the Direct Access Agreement; <p>Additional requirements and exceptions to the Technical Specifications and GSM Association Permanent Reference Documents, as agreed between the Parties, are detailed in this document.</p>
Implementation of network and services	<p>IR Services</p> <p>The Services provided by Vodafone:</p> <ol style="list-style-type: none"> 1. shall only be made available to individual Roaming Customers having valid legal relationships with the Access Seeker; 2. The availability of Services may depend on the availability of appropriate functionality; and 3. Roaming Customers, during roaming, shall experience conditions of service that do not differ substantially from those provided to other Roaming Customers of Vodafone. 4. Services are provided based on the precondition that Roaming Customers are expected to have a usage pattern that does not differ substantially from other EU roaming customers on Vodafone's network.
Management of Modification to the IR Services	<p>Following notice of change served by either Party to implement new IR Services or change existing IR Services, both Parties shall discuss the impact of any such change for Roaming Customers (including Roaming Customers access to these IR Services) and shall agree the necessary actions to be performed, including without limitation, in relation to:</p> <ol style="list-style-type: none"> 1. Network and billing test procedures as set out in the Technical Specifications and the GSM Association Permanent Reference Documents, as requested by either Party; 2. Administrative activities; 3. The targeted starting date for the changed services.
Charges	<p>Subject to the regulated rates, according to article 9, 10, and 11 of the EU Regulation as updated from time to time.</p>

	<p>The Access Seeker shall be liable for the payment to Vodafone of The Access Seeker's Roaming Customers usage of the VPMN Operator's IR Services, based on the applicable IR Charges as evidenced by the relevant TAP file information</p> <p><i>Implementation of TAP</i></p> <p>VRS shall ensure that the Vodafone Participating Companies shall implement, TAP according to the GSM Association Permanent Reference Documents and the provisions set out in the Fraud Prevention section of this document.</p> <p><i>Billing and Accounting</i></p> <p>The Parties shall implement billing and accounting according to the GSM Association Permanent Reference Documents and the provisions set out in C.3.2 of the Common Annexes.</p> <p>Vodafone is entitled to ask the Access Seeker, prior to the commercial launch, to provide a bank guarantee based on the traffic forecast for the coming twelve months. If traffic volumes change the roaming provider may request the bank guarantee to be changed accordingly.</p>
Fraud Prevention	<p>The Parties shall comply with the procedures and provisions concerning fraudulent or unauthorised use of IR Services set under this document and within the relevant GSM Association Permanent Reference Document BA20.</p> <p>Where a Vodafone Participating Company, acting as VPMN Operator, fails to comply with the procedures described in the GSMA PRD BA.20 and if, as a result of such non-compliance, the Access Seeker, acting as HPMN, becomes aware of the possibility that it will suffer from an associated fraud loss, the Access Seeker shall within 24 hours inform Vodafone about the potential fraud case in order for Vodafone to be able to inform the other Vodafone Participating Companies as soon as possible and to minimise the impact of any fraud attack.</p> <p>If the Access Seeker decides to issue a fraud claim, it must provide Vodafone with information in accordance with the GSMA PRD BA.20. Where the Access Seeker has implemented NRTRDE with the relevant Vodafone Participating Company such information shall include the following:</p> <ul style="list-style-type: none"> ▪ an overview of the fraud claim including the amount due; ▪ the relevant File Delivery Reports; ▪ the relevant Error Reports; ▪ the relevant NRTRDE files (if any);

	<ul style="list-style-type: none"> ▪ the relevant records of fraudulent usage. ▪ all correspondence with the relevant Vodafone Participating Company(ies). <p>Where the Access Seeker has not implemented NRTRDE with the relevant Vodafone Participating Company, it shall attach to any fraud claim the following information</p> <ul style="list-style-type: none"> • an overview of the fraud claim including the amount due; • the relevant High Usage Reports; • the relevant statement from the HPMN Operator as referred to in the GSMA PRD BA.20; • all documentation exchanged between the HPMN and VPMN Operators in relation to the fraud claim; <p>Following the receipt of the Access Seeker's fraud claim, Vodafone will check the information provided above and follow the procedure described in the GSMA PRD BA.20. For the avoidance of doubt, Vodafone shall only pay fraud claims once VRS has received the relevant ERTDR.</p>
Permanent, anomalous and abusive use of roaming access	<p>The Parties regard as a matter of fundamental importance the prevention of permanent, anomalous or abusive use of roaming access for purposes other than the provision of regulated roaming services to end users while they are periodically traveling within the European Union as further described in applicable legislation (in particular but not limited to Regulation (EU) 531/2012) as amended from time to time ("Applicable Roaming Legislation").</p> <p>As such, any misuse of the Applicable Roaming Legislation is strictly prohibited and the Parties reserve the right to take measures (including but not limited to termination of the Roaming Agreement) pursuant to such Applicable Roaming Legislation as amended from time to time.</p>

Suspension of IR Services	<p>Suspension of IR Services to Roaming Customers</p> <p>Notwithstanding anything in the Direct Access Agreement to the contrary, Vodafone may without liability suspend or terminate all or any of its Services to Roaming Customer(s) in circumstances where it would suspend or terminate those IR Services to its own Roaming Customers, as relevant, including but not limited to:</p> <ol style="list-style-type: none">1. Roaming Customers using equipment which is defective or illegal; or2. Roaming Customers causing any technical or other problems on any Vodafone Participating Company's Public Mobile Network; or3. Suspected fraudulent or unauthorised use; or4. Authentication of the legal relationship not being possible; or5. Maintenance or enhancement of its public mobile network; or6. Suspension for nonpayment in excess of 3 months. <p>In case of a proposed suspension of Services to all Roaming Customers, Vodafone shall use commercially reasonable efforts to give four (4) weeks written notice (shorter notice may apply given the circumstances related to the suspension) to the Access Seeker prior to the suspension taking effect. If the suspension continues for more than six (6) months, the Access Seeker shall have the right to terminate the Agreement with immediate effect by written notice.</p> <p>Notwithstanding the provisions contained under the Implementation of the Network and Services section outlined above, the Access Seeker has the right at any time, for technical reasons, without liability but upon detailed written notice to Vodafone to suspend access to the Services to its Roaming Customers. Alternatively, if it is technically more practicable the Access Seeker may require that Vodafone suspend all its Services to Roaming Customers of the Access Seeker. Vodafone shall use reasonable endeavors to comply with such requirement within seven (7) calendar days after receipt of the said notice.</p> <p>The Parties agree that the suspension shall be removed as soon as the technical reason for the suspension has been overcome by Vodafone or the Access Seeker as the case may be.</p>
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Duration of the Agreement	Perpetual unless terminated by one of the Parties in writing subject to a period of notice of six (6) months (subject to the Termination Provisions).
Termination of the Agreement	<p>In addition to the conditions of outlined under this document, the Direct Access Agreement may be terminated as follows:</p> <ol style="list-style-type: none"> 1. By mutual agreement of the Parties; or 2. By one of the Parties, with immediate effect, when the other Party is in material breach of the Agreement and does not or is not capable of remedying such breach within sixty (60) days of receipt of a written notice to such effect; or 3. By one of the Parties, with immediate effect, if the other Party becomes bankrupt or insolvent or if that other Party enters into any composition or arrangement with its creditors and that other Party is not able to ensure performance of its obligations under the Agreement by a guarantee from a first-class bank, payable on first written demand; or 4. Immediately in the event a final order by the relevant governmental authority revoking or denying renewal of the license(s) or permission to operate respective Party's business that is required under this Agreement. <p>In the event of termination of this Agreement, the following will apply:</p> <ol style="list-style-type: none"> (a) Each Party shall pay to the other any undisputed outstanding invoices and other payments due to them in connection with this Agreement, and (b) Each Party shall use its best endeavors to cease the provision of IR Services as soon as reasonably practicable, (c) All rights and obligations of the Parties in connection with this Agreement will immediately cease to have effect, except that termination will not affect: <ul style="list-style-type: none"> • any of their respective accrued rights and obligations at the date of termination; and • any rights and obligations that expressly or by implication are intended to come into or continue in force including Articles 3 (Definitions and Interpretation), 10 (Confidentiality), 13 (Liability), 17 (Termination), 18 (Intellectual Property Rights), 20.4 (Severability) 20.8 (Entire Agreement), 20.12 (Survival) and 21 (Governing Law).
Intellectual Property Rights	Nothing in the Direct Access Agreement shall be deemed or construed as a transfer of title or ownership nor as the granting of any license, right to use and/or as giving rise to any encumbrance of any kind with regard to either Party's Intellectual Property Rights.
Annexes	
Agreement Management Principles	<ol style="list-style-type: none"> 1. Notices <p>All notices, information and communications required under the Direct Access Agreement shall be made in writing in English and shall be sent either by mail, telefax or secure email to the relevant contact person as indicated in I.1.1 of the Individual Annexes or to such other address and/or facsimile number as may be notified in writing by either Party</p> 2. Structure of Annexes and Addenda under the Direct Access Agreement <p>The Annexes are of two types:</p> <ul style="list-style-type: none"> • "Common" Annexes are common for both Parties. • "Individual" Annexes consist of two separate parts, one part for each Party.

	<p>Each Party provides and maintains its own part. This gives the possibility to update e.g., a contact point list individually for each operator.</p> <p>Each set of individual Annexes holds a revision sheet containing an index of all individual Annexes contained, with the revision status and recognition level.</p> <p>“Addenda” are common for both Parties.</p> <p>3. Revision Procedure</p> <p>Unless otherwise agreed, the Parties will follow below procedure to update the Annexes. All updates to the Annexes shall be exchanged by mail or courier.</p> <p>For Individual Annexes: The updating Party shall forward at least one copy, either in an electronic format or hard copy. If a hard copy is used, then the copy should be signed on the updated pages. In both cases, (either in electronic format or hard copy) the individual Annexes should include an updated revision sheet to the contact point indicated in I.1.1 of the Individual Annexes. The receiving Party acknowledges receipt of the updated Annex by returning the revision sheet duly signed in case a hard copy is used.</p> <p>For Common Annexes: The updating Party shall forward two signed copies of the updated pages to the contact point indicated in I.1.1 of the Individual Annexes. The receiving Party approves the updating by returning one of the two copies, duly signed.</p> <p>4. Effective Dates</p> <p>Each update shall be clearly identified by its revision date as agreed between the Parties.</p>
Services	<p>The implementation of IR Services shall be in accordance with the Technical Specifications with the exception of Public Mobile Network specific deviations and/or chosen options agreed by both Parties during the testing phase</p>
Billing and Accounting	<p>INFORMATION ON TAP</p> <p>The implementation of the TAP necessary to provide IR Services shall be in accordance with the GSM Association Permanent Reference Documents.</p> <p><i>Data Exchange Procedure</i></p> <p>Interchange of TAP records shall be performed by Electronic Data Interchange (EDI). Transfer shall be within the standard timescale and the standard frequency as defined in the GSM Association Permanent Reference Documents.</p> <p>For the time being the transfer schedules for the Parties shall be as follows:</p> <p>When Vodafone is the sending Party: <u>Daily</u></p> <p>Any changes in the exchange frequencies shall be agreed between the Access Seeker Vodafone before implementation. When no charging data are available <u>Notification files</u> will be exchanged.</p> <p>Fallback Procedure</p>

	<p>In case of EDI failures or delays in EDI transfer the fallback procedure shall come into effect as specified by TADIG in GSM Association Permanent Reference Documents.</p> <p>The fallback procedure as specified by TADIG will only be used in exceptional circumstances and the method of transfer shall be as follows: CD-ROMs shall be sent by express mail or courier not later than 10 days after the cut-off.</p> <p>Where there is a delay in the sending of the billing files, according to the agreed fallback procedure then the Access Seeker shall be immediately advised. The use of the fallback procedure does not change the liability as defined under Data Exchange Procedure above.</p> <p>Changes in the time schedules Any changes in the time schedules concerning the exchange of billing files shall be agreed before implementation.</p> <p>Data Clearing House In case of using Data Clearing House for data interchange, the responsibilities of Roaming Provider remain as they are defined by the GSM Association and in Permanent Reference Documents.</p> <p>INFORMATION ON SMS IW DATA</p> <p>The implementation of the SMS IW data transfer and information exchanged as SMS IW data.</p> <p>The implementation by and between the VPMN Operator and the HPMN Operator of the SMS IW data shall be in accordance with the GSM Association Permanent Reference Documents with the exception of Public Mobile Network specific deviations and/or chosen options agreed by the VPMN Operator and the HPMN Operator during the testing phase.</p>
Settlement Procedure	<p>The settlement procedure outlined below applies as from the Effective Date or Starting Date, as relevant, and relate to the invoicing and payment of IR Charges between the Parties.</p> <p><i>1. IR Charges</i></p> <p>1.1 At the same time, it signs this Agreement, [Party B] shall also sign C.10 of the Common Annexes, Letter of Mandate, according to which VRS is authorised by [Party B] to engage and communicate directly with its Data and Financial Clearing House to ensure that VRS is provided with:</p> <ul style="list-style-type: none"> all TAP file summaries (daily and monthly Roaming Data Traffic Reports) from [Party B]’s DCH; and Multinetwork invoices (as defined below) from [Party B]’s FCH <p>C.10 of the Common Annexes, Letter of Mandate, also allows VRS to engage and communicate directly with [Party B]’s Financial Clearing House to ensure that netting and settlement is administered correctly between [Party B] and VRS.</p> <p>1.2 No later than twelve (12) calendar days after each Invoice Period, the Party acting as VPMN Operator shall provide to the financial clearing entity of the</p>

	<p>other Party acting as HPMN Operator as designated, only one associated invoice (below a "Multinetwork Invoice") in SDR and EUR based on the traffic data included in the TAP file summaries that includes any and all of the Vodafone Participating Companies, for which IR Charges have been generated. Before sending the hard copy of the Multinetwork Invoice the Parties shall provide each other with a fax or an invoice copy by email. If a Party fails to provide only one Multinetwork Invoice as outlined above, the other party shall not be obliged to process and settle any or all invoices provided to its financial clearing entity. If during any Invoice Period VRS does not receive the TAP file summaries due to [Party B's] failure to sign, or due to [Party B]'s revocation of, the Letter of Mandate as referred to under Section 1.1 above shall give VRS the right to issue a Multinetwork Invoice based on any data available to it. [Party B] shall not have the right to dispute this invoice on the basis of the data used to issue the invoice.</p>
1.3	<p>The Paying Party shall then pay the relevant invoice amount to the Charging Party in accordance with agreed netting procedures as set out in the relevant GSMA PRD within 45 calendar days following the last day of the Invoice Period to which the invoice refers. If this day is not a business day for the Paying Party, then the preceding business day shall apply. If a Party does not send a Multinetwork Invoice by the agreed date or if on time but not a Multinetwork Invoice, it shall nevertheless be obliged to effect prompt and full payment of the other Party's invoice, provided it is a Multinetwork Invoice and has been sent in time. In case of a difference between the invoice amount and the RTDR information, the relevant Party shall issue a credit note or invoice as appropriate. The invoice amounts (and credit note amounts if appropriate) for the two directions shall be offset against each other and the net SDR balance shall be paid by the relevant Party.</p>
1.4	<p>Payment shall be made in EU calculated from the net SDR balance obtained by the netting process (as stated in Section 1.3 above). Conversion from the SDR into EUR shall be made at the pegged rate quoted by the International Monetary Fund on the 23rd of the calendar month preceding the Invoice Period or, if the International Monetary Fund does not publish its pegged rate on this day for any reason, the previous business day as defined in the GSMA PRD BA.11.</p>
1.5	<p>In the event that the Paying Party disputes any IR Charges, the Paying Party shall notify the Charging Party in writing within 14 days of issue of the invoice that it has a dispute, including all reasonable details of the traffic disputed which are sufficient for it to substantiate its claim and for the Charging Party to perform its own assessment. The Parties shall then consult in good faith to resolve the dispute within thirty (30) calendar days. Should the consultation not produce an agreed amount, a Party may then refer the matter through the dispute resolution procedure set out in the Agreement.</p>
1.6	<p>Where the amount in dispute equals or exceeds five (5) % of the invoiced amount the Paying Party may withhold the disputed amount from that invoice pending the outcome of the consultation period, and where appropriate, the dispute resolution procedure, but shall pay the non-disputed amount of the relevant invoice in accordance with the provisions in this Annex C.3.2. Where the amount in dispute is less than five (5) % of the invoiced amount, the Paying Party shall pay the disputed amount from the invoice and from any subsequent invoice for IR traffic or services from the Charging Party.</p>

	<p>1.7 In cases where disputed amounts are proven, the Party entitled to benefit from the disputed amount shall be entitled to receive interest (in addition to the proven disputed amount) on the following basis: EURIBOR 1 month rate (rate taken from the day the dispute was notified to the other Party) plus 3 percent per annum. The calculation of the applicable interest rate to use in the proven disputed amount calculation shall be: ((EURIBOR as defined above, plus 3%) * (No. of days payment was outstanding/365) * (value of disputed amount)). For the avoidance of doubt, the interest benefit is calculated using the simple interest method of calculation.</p> <p>1.8 Where bank fees occur, any such expense imposed in [Party B]'s country shall be borne by [Party B] and expenses imposed in VRS' country shall be borne by VRS. Any other charges relating to a third (intermediate bank) shall be borne by the Party who requested the use of that bank.</p> <p>1.9 In the case where the Paying Party pays in different currency than agreed in the applicable annex or pays to the wrong bank account, the Paying Party is obliged to compensate the Charging Party for any proven costs charged to the Charging Party by any relevant bank as a result of different currency or wrong bank account being used. Such proven costs, when agreed between the Parties, shall be invoiced, and paid in accordance with this Annex C.3.2.</p> <p>2. <i>Taxes</i></p> <p>Wherever referred to VAT below it shall mean any value added tax or any analogous tax in any relevant jurisdiction including but not limited to use, sales and local sales taxes imposed by any authority.</p> <p>2.1 The IR Charges paid under this Agreement shall be paid without required withholding or deduction unless prohibited by any applicable law. In the event that the Paying Party is obliged by applicable law to deduct withholding tax from the charge, the Paying Party shall use reasonable efforts to make all necessary filings in order to ensure that the provisions of the relevant double tax treaty (if any) applies to the charge prior to their actual payment/settlement. The Paying Party shall request from the Charging Party, in a timely manner, all necessary information required to make the relevant filings in order to ensure the appropriate exemption certificate is issued by the competent tax authority prior to the payment of the relevant charges.</p> <p>2.2 In the event that withholding tax is payable by the Paying Party in respect of the relevant charges the Paying Party will, simultaneously with making the charge or payment hereunder, (i) pay to the Charging Party such additional amount as will result in the receipt by the Charging Party of the full amount which would otherwise have been receivable had no withholding or deduction been payable, and (ii) supply to the Charging Party evidence satisfactory to the Charging Party that the Paying Party has accounted to the relevant authority for the sum withheld or deducted.</p> <p>2.3 The IR Charges shall be exclusive of VAT, which shall be payable in addition where applicable, but inclusive of all other taxes.</p> <p>2.4 Where the Vodafone Participating Company applies VAT on its IR Charges invoiced to VRS, the IR Charges that VRS is invoicing to [Party B] shall be increased by an amount equal to the VAT incurred by VRS.</p>
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	<p>2.5 The Charging Party will assist the Paying Party to recover any taxes paid under this Agreement to the extent possible. In this respect, the Charging Party shall provide the Paying Party with a valid invoice that meets all requirements imposed by the relevant taxation authorities and which meets all further conditions necessary to allow the Paying Party to obtain relief from such tax, if a relief procedure is available.</p> <p>2.6 Either Party agrees to provide to the other Party its VAT registration number and such other related information as may be reasonably requested in relation to any supply hereunder.</p> <p>2.7 The Paying Party reserves the right to withhold payment of any taxes to the Charging Party until the Charging Party has provided the information under Article 2.6.</p>
Customer Care Principles	<p>A Roaming Customer should contact the Customer Care Services of his home contract partner (Customer Care Services of the Access Seeker while roaming in the Public Mobile Network of Vodafone) This home Customer Care Services will provide the first point of contact but may refer the Roaming Customer to Vodafone's Customer Care Services if appropriate.</p> <p>The Roaming Customer is free to contact the Vodafone network Customer Care Services directly. However, the primary responsibility for customer care remains with the Access Seeker</p> <p>Each Party will ensure that there is, at least during office hours, an English-speaking operator on duty, to whom a Roaming Customer can be referred.</p> <p>Customer care contact numbers are defined here: <i>[provided to access seeker during contract negotiation process]</i></p> <p>Customer care information for SMS Interworking is contained in the relevant Addendum signed between the Parties.</p> <p>Roaming Information</p> <p>Changes in Emergency Service, Customer Service, Directory Enquiry numbers, and Tariffs shall be exchanged in accordance with the provisions of the Agreement.</p> <p>The Access Seeker shall inform its own Roaming Customers about roaming in Vodafone's Public Mobile Network.</p> <p>Public Mobile Network Faults</p> <p>In the event of a perceived Public Mobile Network fault a Roaming Customer should contact the home Customer Care Services while roaming in the Public Mobile Network of Vodafone. The home Customer Care Services will provide the first point of contact but may refer the Roaming Customer to Vodafone's Customer Care Services if appropriate.</p> <p>In the event that the Customer Care Services of one Party has a query concerning potential faults of the other Party's Public Mobile Network, then the Customer Care Services shall contact the contact point defined below.</p> <p>In addition, it may be necessary that technical experts of one Party get into direct contact with the other Party's technical experts (e.g. to establish trouble shooting). In such cases additional contact points shall be provided. These contact points are defined below.</p>

	<p>Frequently arising faults in the Public Mobile Network or Services of Vodafone experienced by Roaming Customers and indicated to the Access Seeker shall be reported to the other Party's contact point.</p> <p>Lost/Stolen SIM and/or USIM-Cards</p> <p>In the event that a SIM and/or USIM-card is lost or stolen, the Roaming Customer shall be asked to contact his home Customer Care Services. If the Roaming Customer contacts Vodafone's Customer Care Services, Vodafone's Customer Care Services will provide the Roaming Customer with the contact number of his home Customer Care Services.</p> <p>Lost/stolen or Faulty Mobile Equipment</p> <p>In the event that mobile equipment is lost, stolen, or faulty, the Roaming Customer shall be asked to contact his home Customer Care Services. If the Roaming Customer contacts Vodafone's Customer Care Services he will be referred to his home Customer Care Services.</p> <p>Billing Enquiries</p> <p>In the event that a Roaming Customer has an enquiry relating to the amount billed during roaming, the Roaming Customer shall resolve this query with his home Customer Care Services. Any contact with Vodafone will be achieved through his home Customer Care Services.</p>
Cell Broadcast	<p>Cell broadcast is available via the mobile network of Vodafone in the Netherlands for public warning purposes. Vodafone sends NL-alert messages via 2 Cell broadcasting channels: 919 (for national users) and 4371 for inbound roamers.</p> <p>Important to notice is that an inbound roamer handset should support the international standard 4371 channel.</p>

Quality of Service (QoS)	<p>For VZ's QoS parameters and specifications that is supported for the relevant routing scenarios, generally available radio technologies, frequency bands and other configurations or parameters we kindly refer to our latest available IR21 document to be retrieved via the GSMA infocentre.</p> <p>The Access Seeker acknowledge and agrees that the Services or parts thereof may not be available from time to time as a result of a number of factors, including but not limited to capacity constraints, electromagnetic interference, adverse weather conditions, excessive use of the VodafoneZiggo Network, equipment failure, the location of the MSISDN particularly if indoors or underground, or during maintenance activities.</p> <p>VodafoneZiggo confirms and agrees that it will offer the same quality of service to end users of the Access Seeker as to its own VodafoneZiggo Customers and shall not otherwise discriminate against the Access Seeker or its end users.</p>
Emergency communications	<p>The emergency number in the Netherlands is 112 and generally available for inbound roamers. Next to that, PSAP (caller location information) technology is generally available via network triangulation. Further, if the handset is supporting AML in the Netherlands the handset is able to send an AML SMS message to PSAP.</p>
Testing	<p>Overview of testing procedures:</p> <p>Testing would be carried out as per GSMA standards and PRDs.</p> <ul style="list-style-type: none"> - Exchange of test SIMs - Test before the commercial start of roaming services - Certification of Testing - Commercial launch - Testing during the commercial roaming phase <p>Any additional tests are subject to further agreement between the Parties- all areas of testing will be described in a proper level of detail within the Direct Access Agreement</p>
Security	<p>Security functions of the individual Parties are specified below and within any other PRD documents.</p> <p>Authentication</p> <p>The Parties agree to implement Customer Identity Authentication for Roamers on their network. The purpose and mechanism for authentication are described in GSM 02.09 and in GSMA PRDSG.15.</p> <p>The Parties agree that authentication shall be performed as specified below: For Roaming Customers (at the commencement of GSM service, or 3G or 4G service) authentication is to be performed at every occasion of:-</p> <ul style="list-style-type: none"> • Network access using IMSI • Location updating involving VLR change • Network access for at least 1 in x mobile originated and terminated call set-ups (incl. SMS) for the Access Seeker. (The value of x should be less than 10) • Supplementary service operation outside call

	<ul style="list-style-type: none"> • Cipher key sequence number mismatch If GPRS is supported, authentication is also to be performed at every occasion of: • GPRS attach • routing area updating involving SGSN change • PDP context activation • P-TIMSI (P- Temporary IMSI) signature mismatch, if P-TMSI signature is used • P-TMSI signature not inserted in a Attach Request or Routing Area Update Request <p>Authentication during a malfunction of the network</p> <p>The Parties agree that if a mobile station (MS) is registered and has been successfully authenticated, whether active or not active on a call, calls are permitted (including continuation and handover) and the Direct Wholesale Roaming Access Seeker will receive the charge.</p> <p>If an MS attempts to register or re-register and cannot be successfully authenticated due to the network malfunction, calls are not permitted.</p> <p>If an MS has already been registered on the network, and has already been authenticated, and cannot be successfully re-authenticated due to network malfunction (e.g., the Vodafone was not able to provide authentication pairs RAND, SRES),</p> <p>(Delete the option that does not apply)</p> <p>the Parties agree that calls are permitted and that the Access Seeker will receive the charge.</p> <p>or</p> <p>the Parties agree that calls are not permitted and that the Access Seeker will not receive any charges</p>
Signalling interconnection or IP connectivity	<p>The implementation of the Signalling Protocols and/or Inter-PLMN backbone (as defined in IREG PRDs) shall be in accordance with the Technical Specifications and relevant GSM Association Permanent Reference Documents with the exception of Public Mobile Network specific deviations and/or chosen options agreed by both Parties during the testing phase.</p> <p>The technical information relevant for International Roaming shall be exchanged between the Parties as part of IREG testing procedures and IREG PRDs.</p> <p>Each Party agrees to adhere to the processes set out in PRD IR.21, Section 4: Procedures for Updating the Database, when making changes in the numbering and addressing information with an impact on International Roaming.</p>
Fraud Prevention	The Parties shall implement fraud procedures as specified by the GSM Association within Binding PRD BA.20
Letter of Mandate	Letter of Mandate authorising Vodafone to interact with the data and financial clearing house of the Access Seeker (if applicable)