Organización de Aviación Civil Internacional
Oficina Regional Sudamericana - Proyecto Regional RLA/03/901
Sistema de Gestión de la REDDIG y Administración del Segmento Satelital
Decimosexta Reunión del Comité de Coordinación (RCC/16)
Lima, Perú, 18 al 20 de marzo de 2013

Cuestión 4 del Orden del Día: **Seguimiento de las actividades de implantación de la REDDIG II**

(Nota presentada por la Secretaría)

RESUMEN	
Esta nota de estudio presenta información sobre los avances en la implantación de la nueva red digital sudamericana -- REDDIGII.	
REFERENCIAS • Informe de la Decimoquinta Reunión del Comité de Coordinación de la REDDIG (RCC/15) (Lima, Perú,15-17 de agosto de 2012); e • Informe reunión negociación REDDIG II (Montreal, Canadá, 27-31 de agosto de2012).	
Objetivos estratégicos de la OACI:	*A – Seguridad operacional* *C – Protección del medio ambiente y desarrollo sostenible del transporte aéreo*

1. Introducción

1.1 La decimoquinta reunión del Comité de Coordinación de la REDDIG (RCC/15) (Lima, Perú, del 15 al 17 de agosto de 2012), aprobó los resultados del proceso de evaluación de la licitación de la REDDIG II a través de la Conclusión 15/3 y revisó los aspectos que se tratarían en el proceso de negociación.

1.2 El proceso de negociación se inició con una reunión en la Dirección de la Cooperación Técnica de la OACI en Montreal, Canadá, del 27 al 31 de agosto de 2012, en la cual participaron representantes de la empresa ganadora del proceso de licitación, representantes de la OACI y, como observadores, representantes de Brasil y Trinidad &Tobago. Posterior a este evento, se realizaron varias reuniones de coordinación para continuar con el proceso de negociación, las cuales culminaron a finales de febrero de 2013.

2. Análisis

2.1 Como resultado del proceso de negociación, se logró que la empresa ganadora incluyera en su oferta los siguientes aspectos considerados durante la fase de evaluación de las ofertas de la REDDIG II y la reunión RCC/15:

a) Sustitución de un MODEM satelital en los nodos de Manaos y Ezeiza;
b) Traslado de las antenas en los nodos de Asunción y Santiago (opcional contrato REDDIG II);

c) Confirmación de los aspectos técnicos sobre los amplificadores y el sistema de gestión de la red;
d) Presentación de detalles sobre el manual de entrenamiento; y
e) Adquisición de teléfonos IP para apoyar los requerimientos de los servicios de voz para las gestiones de control de flujo a nivel regional.

2.2 Durante el periodo de negociación se revisó el documento *Service Level Agreement* (SLA) de la empresa ganadora para prestar los servicios de comunicaciones terrestres. Se consideró que el periodo de validez del SLA sería los primeros seis meses de servicio contemplado en las especificaciones técnicas de la REDDIG II. En caso que los miembros de la REDDIG decidan extender el contrato de prestación de servicio terrestre, se procederá de nuevo a la revisión del SLA por parte de los Estados miembros de la REDDIG. Copia del SLA revisado se presenta como **Apéndice A** de esta nota de estudio.

2.3 El contrato establecido se ejecutará en dos fases, en la Fase 1, a ejecutarse en el transcurso del segundo trimestre del 2013, la empresa ganadora presentará los documentos de diseño de la REDDIG II, los procedimientos de instalación, los manuales de entrenamiento, los documentos de aceptación en fábrica, en el sitio, red, etc., que serían revisados por los Estados miembros de la REDDIG. La Fase 2 incluye la instalación de la REDDIG II y comenzará una vez que todos los Estados miembros de la REDDIG hayan cancelado las cuotas correspondientes de la REDDIG II, previstas para más tardar el 31 de marzo de 2013. El contrato será presentado en la Reunión para su revisión. El contrato entre la OACI y la empresa ganadora está previsto firmarse para finales de marzo de 2013.

2.4 Los puntos focales nominados por los Estados miembros de la REDDIG se presentan como **Apéndice B**. Los puntos focales se encargarán de dar seguimiento a la instalación de los nodos de la REDDIG II en su Estado, así como en la aceptación provisional y final del funcionamiento del nodo.

2.5 Los puntos focales deben participar en las reuniones de coordinación y cursos previstos en el contrato. A este respecto, las autoridades de los Estados miembros de la REDDIG deben facilitar la participación de los mismos, con el fin de poder completar con éxito la instalación de la REDDIG II. El Apéndice A de la NE/05 presenta el cronograma de actividades para la implantación de la REDDIG II.

3. Acción sugerida

3.1 Se invita a la Reunión a:

a) tomar nota de la información suministrada;
b) revisar el contrato entre la OACI y la empresa ganadora para la implantación de la REDDIG II, que será presentado en la Reunión;
c) revisar la lista de puntos focales que se presenta como Apéndice B de esta nota de estudio; y
d) analizar otras consideraciones al respecto que la Reunión considere necesaria.

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APPENDIX A / APENDICE A

General comment:

The only service that we are considering according to the technical specifications is IPVPN services. We do not have DIA services. For this reason, we consider the non inclusion of this type of service in the SLA.

Meeting 20 Feb.13: Level 3: OK

IPVPN ~~AND DIA~~ SPECIFIC TERMS AND CONDITIONS AND SERVICE LEVEL AGREEMENT

Level 3 IPVPN~~ and DIA Services~~. This ese~~a~~is~~re~~ the Service Terms and Service Level Agreements for Level 3's IPVPN ~~and DIA~~ Service~~s~~ ("The Service") which apply to IPVPN ~~and DIA~~ Service~~s~~ provided by Level 3("Service Terms"), that make part of the contract executed between ICAO – INEO and Level 3 ("Contract"). Initial capitalized terms not defined in these terms and conditions have the meanings given to them in the Contract.All references to the Client herein will be understood to be made in reference to ICAO.

Meeting 20 Feb.13: Level 3: OKto revise as above.

1. Description of Services

1.1 **Service Description:**Level 3 Converged IP Services provide end-to-end voice, data and multimedia/collaboration applications that are managed and delivered on Level 3's MPLS-based IP Network at designated speeds, subject to availability at individual Level 3 access points, enabling the customer to transport voice, data and multimedia/collaboration applications among two or more customer designated locations ("Sites"),~~ or if selected, to and from the Internet~~.

Meeting 20 Feb.13: Level 3: OK to delete "or if selected, to and from the Internet".

1.2 Customer shall execute Order Form(s) for the Service which will designate the following elements: (i) Converged Connection type (IPVPN~~ or DIA)~~, (ii) Service Application, (iii) Service speed, (iv) Point(s) of Presence ("POPs") at which Customer will access the Level 3 IP Network, (v) local access circuit requirements (if any), (vi) pricing, (vii) length of Initial Term for the Service(s), (viii) Class of Service ("CoS") levels (Basic, Enhanced or Premium) applying at each IP VPN port (if applicable), and (ix) optional services selected by Customer, if any (including Internet Access).

Meeting 20 Feb.13: Level 3: OKto delete "or DIA"

2. Converged Connection Type~~s~~:

2. ~~Two Converged Connection Types are available: Level 3 IP VPN and Level 3 Dedicated Internet Access ("DIA"). Customer may choose to have multiple Converged Connection Types at each Site at which Services are to be provided~~.

Meeting 20 Feb.13: Level 3: OK to delete above Article

2.1 **IP VPN Service:**Level 3 IP VPN Service provides data transportation among two or more customer sites, through Level 3 IP VPN Network at designated speeds, and at the Class of Service ("CoS") chosen by Customer. The following three CoS levels are available at each IP VPN Converged Connection Type.

- Basic (standard or bronze)
- Enhanced (Preferred or silver)
- Premium (real time or gold)

2.1.2 **Billing Options**: The IP VPN Service includes the following billing components:

- Monthly Recurring Charge ("MRC Charge"): a monthly recurrent charge applied for a specified bandwidth level and CoS configuration for each Site.
- ~~Non Recurring Charge ("NRC Charge"): a non recurring charge applied for a specified bandwidth level and CoS configuration for each Site.~~[SO1]**Meeting 20 Feb.13: Level 3: OK to delete "NRC"**
- In addition to the above billing components, per event charges apply for logical and/or physical service change requests, including (but not limited to) changes in routing protocols, encapsulation, bandwidth, rate limits or CoS level. Change Order Charges are set out in the Order Form for the Service or agreed with Customer at the time the charge order request is received from Customer.

~~2.2 **Dedicated Internet Access (DIA):** Level 3 Dedicated Internet Access (DIA) service provides a connection to Level 3 Internet Service Points of Presence at designated speeds, at one or more Customer Sites. Level 3 shall provide up to 8 owned IP addresses for those customers that do not have their own IP address blocks.~~

~~2.2.1 **BillingOptions**: The DIA Converged Connection Type includes the following billing components:~~

- ~~Monthly Recurring Charge ("MRC Charge"): a monthly recurrent charge applied for a specified bandwidth level for each Site.~~
- ~~Non Recurring Charge ("NRC Charge"): a non recurring charge applied for a specified bandwidth level for each Site.~~
- ~~Change request charges: these charges apply for logical and/or physical service change requests, including (but not limited to) changes in routing protocols, encapsulation, bandwidth, rate limits or CoS level. Change Order Charges are set out in the Order Form for the Service or agreed with Customer at the time the charge order request is received from Customer.~~

Meeting 20 Feb.13: Level 3: OK to delete Article 2.2

3. Service Level Agreement (SLA)

3.1 **Service Delivery Guarantee Date applied to IPVPN ~~and DIA~~ (the below Article 3.1 does not apply and is for information purposes only. Level 3 will coordinate directly with INEO to respect the implementation schedule of Contract 22501200)**

Meeting 20 Feb.13: Level 3: OK

3.1.1 If for reasons attributable to Level 3, Service was unavailable for Customer use at the "Ready for Service Date" (RFSD) agreed between Level 3 and the Customer; the Customer shall be entitled to claim a credit on the Non Recurring Charge for installation on the affected site.

3.1.2 **Delivery Service Delay Credits**

Number of delayed days further to the RFSD	**RFSD Credits [Percentage of the NRC for installation on the affected site]**
1 to 10	**10%**
11 to 20	**30%**
21 to 30	**50%**
31 to 45	**70%**
Above 46	**100%**

3.1.3 Exclusions: The Customer shall not be entitled to any credit based on nonfulfillment of Delivery Date under the following circumstances:

i. If the Customer has hired local accesses directly from third parties, or
ii. If the pre-scheduled RFSD was changed further to the request order; or was delayed for reasons to which Level 3 is alien.

3.1.4 Expected Delivery Time is of Sixty (60) days for all Customer Sites at On-Net locations (as defined in Section 6), effective as from acceptance by Level 3 of a Customer valid Service Order.

3.1.5 Expected Delivery Time is of Ninety (90) days for all Customer Sites at Off-Net locations or connected to a Virtual PoP ("VPOP") (as defined in Section 6), effective as from acceptance by Level 3 of a Customer valid Service Order.[SO2]

~~3.2~~ **Service Availability for IPVPN ~~and DIA~~**
3.2 **Meeting 20 Feb.13: Level 3: OK to delete "and DIA"**

3.2.1 **Expected Service Availability**

- Service availability as well as credits specified below shall apply only to those On-Net Customer Sites (as defined in Section 6) with CPE's (Customer Premise Equipment) managed by Level 3.
- Level 3 backbone POP to POP availability: Level 3 target backbone POP to POP availability is **99.99%.**
- Level 3 POP to VPOP availability: Level 3 target availability for PoP to VPOP is of **99.8%.**
- Last Mile links availability: Customers Last Mile Links Availability comes to **99.7% for On Net sites and to 99.5% for VPOPs.** Thisavailability will be measured by the CPE (Customer Premise Equipment).

Availability for a given Site is calculated as:

$P = (A – B) / A * 100$

Where
P: Service Availability (%)
A: Amount of Minutes in a given month.
B: Amount of minutes when service is unavailable (as defined below)[SO3]

3.2.2 **Service Unavailability Credits**

If the actual service fails to meet the expected availability as defined in Section 3.2.1, in a given month, for a given site due to problems reasonably attributable to Level 3, the Customer will be entitled to request a credit of the applicable MRC for the affected Site port as provided in Section 5 hereunder.

The Customer may apply for a credit as described in the table below:

~~Service availability for a given month (OnNet Site)~~	~~Service Unavailability Credits [Percentage on the MRC applied for a given site port]~~
~~99.4% to 99.7%~~	~~5%~~
~~99.0% to 99.4%~~	~~15%~~
~~Below 99%~~	~~30%~~

~~Service availability for a given month (Site connected to VPOP)~~	~~Service Unavailability Credits [Percentage on the MRC applied for a given site port]~~
~~99% to 99,5%~~	~~5%~~
~~98% to 99%~~	~~10%~~
~~Below 98%~~	~~15%~~

[SO4]

Meeting 20 Feb.13: Level 3:

INEO/Level 3 accept the discounts and penalties as described in the technical specifications Section C, Article 5.13., however, the discounts and penalties described therein shall be limited to 100% of the monthly price per site, except for the sites in Guyana, French Guiana, Surinam and Trinidad & Tobago, which are limited to 30% of the monthly price per site.

3.2.3 **Service Unavailability**

- Any Customer Site will be deemed unavailable when data are not received or sent from and to Level 3backbone subject to the conditions specified in Section 5 hereunder.
- If Customer Site fails to accomplish a performance as described in Section 3.4.2, though data are sent and received from or to Level 3 backbone, then this Customer site will be considered to be available.
- During the unavailability period of any Service, performance credits shall not apply.

3.3 **Service Performance only applicable to IPVPN**

3.3.1 **Round Trip Delay**

- Round Trip Delay (RTD) is measured in milliseconds (ms) among Level 3PoPs and VPOPs (as defined in Section 6). Average RTD for a packet will be measured every five (5) minutes in order to consistently obtain an average monthly performance level.
- Average Round Trip Delay for any given packet, measured among Level 3PoPs and VPOPs are shown below. These magnitudes are measured in “ms” and may differ in **10%.**

	Buenos Aires	Sao Paulo	Miami	Bogotá	Caracas	Quito	Santiago	Lima	Sto Domingo	San Juan	Kingston	Port of Spain
Bs As												
Sao Paulo	46											
Miami	160	150										
Bogota	260	250	100									
Caracas	275	265	115	215								
Quito	295	285	135	235	250							
Santiago	35	81	195	295	310	330						
Lima	80	300	150	250	265	285	45					
Sto Domingo	204	194	55	144	159	179	239	194				
San Juan	199	189	50	139	154	174	234	189	83			
Kingston	213	203	72	153	168	188	248	203	97	92		
Port of Spain	256	246	96	196	211	231	291	246	140	135	149	

3.3.2 **Round Trip Delay Credits:**

Meeting 20 Feb.13: Level 3: INEO/Level 3 accept the discounts and penalties as described in the technical specifications Section C, Article 5.13.8. In the case ofdegradation such discounts and penalties shall be limited to 50% of the monthly price per site, except for the sites in Guyana, French Guiana, Surinam and Trinidad & Tobago, which are limited to 15% of the monthly price per site.

When average RTD of a packet, measured during a monthly billing period affects an On-Net Customer Site or a site connected to a VPOP (as defined in Section 6), with Level 3 managed CPE's; and RTD exceeds 10% of the target value described in table above (Section 3.3.1), because of grounds attributable to Level 3, the Customer shall be entitled to request credit for the applicable Recurring Monthly Charge Service for the affected Site Port based on the conditions detailed in Section 5 hereunder.
Customer shall be entitled to credit as specified in the table below:

Average RTD Deviation of a packet as described in Section 3.3.1	**RTD Credits [Percentage on the MRC applied for a given site port]**
0% to +10%	**0%**
+11% to +30%	**5%**
Above 31%	**10%**

[SO5]

- If average RTD deviation for a given pair of PoP's or VPOPs affects more than one On-Net or VPOP connected Customer Site (as defined in Section 6), with Level 3 managed CPE's, only one credit per Service shall apply. Service credit is calculated on the Customer Site with the highest monthly recurring charge compared with all the Customer Sites affected by the same pair of PoP's or VPOPs. Service credits will be subject to the terms and conditions specified in Section 5 hereunder.

- Exclusions: Failures of Service when applied to RTD because of rerouting derived from backbone outages, shall be excluded for credit calculation purposes. Upon the occurrence of these events, Level 3 shall provide Customer with a report of said events.

3.3.3 Packets Loss

- Packet loss target is measured per hour and per connection among Level 3 POPs or VPOPs (as defined in Section 6). Packet loss measurement will be made on an hourly basis to assess monthly average performance level for Packet Loss.
- Average Packet Loss measured for a given pair of Level 3 POPs or VPOPs (as defined in Section 6) is the following.

Class of Service	Average Packet Loss
Premium	< 0.2%
Enhanced	< 0.5%
Basic	< 1%

3.3.4 Packet Loss Credits

Meeting 20 Feb.13: Level 3:INEO/Level 3 accept the discounts and penalties as described in the technical specifications Section C, Article 5.13.8. In the case ofdegradation such discounts and penalties shall be limited to 50% of the monthly price per site, except for the sites in Guyana, French Guiana, Surinam and Trinidad & Tobago, which are limited to 15% of the monthly price per site.

If average packet loss measured for any given month, affects one On-Net or VPOP connected Customer Site (as defined in Section 6), with Level 3 managed CPE, and failure exceeds targets detailed on table of Section 3.3.3 by +10% due to Level 3 attributable grounds, then the Customer will be entitled to request a service credit on the monthly recurring charge for the site port affected according to the table below.

Packet loss target average deviation described in Section 3.3.3	**Packet loss Credits (Percentage on the MRC applied for a given site port)**
0% to +10%	**0%**
+11% to +30%	**5%**
Above +31%	**10%**

[SO6]

- If average Packet Loss deviation for a given Level 3PoP's or VPOPs (as defined in Section 6) affects more than one On-Net or VPOP connected Customer Site (as defined in Section 6), with Level 3 managed CPE's, only one credit per Service shall apply. Service credit is calculated on the Customer Site with the highest monthly recurring charge compared with all the Customer Sites affected by the same pair of Level 3PoP's or VPOPs. Packet Loss credits will be subject to the terms and conditions specified in Section 5 hereunder

3.3.5 Jitter

- Jitter is measured in milliseconds (ms) per hour and per connection among Level 3 POP's or VPOPs (as defined in Section 6). Average Jitter is measured every 30 minutes to consistently assess a monthly average performance level.
- Target Jitter applies only to the Premium Class of Service.
- Level 3 shall make all reasonably technical efforts to achieve a maximum average Jitter of 15 ms, measured for a given pair of Level 3 POPs or VPOPs (defined in Section 6).

3.3.6 **Jitter Credits**

Meeting 20 Feb.13: Level 3:
INEO/Level 3 accept the discounts and penalties as described in the technical specifications Section C, Article 5.13.8. In the case ofdegradation such discounts and penalties shall be limited to 50% of the monthly price per site, except for the sites in Guyana, French Guiana, Surinam and Trinidad & Tobago, which are limited to 15% of the monthly price per site.

- If the actual monthly average Jitter affecting an On-Net or VPOP-connected Customer Site (defined in Section 6), with Level 3 managed CPEs exceeds the parameters described in Section 3.3.5 by 10% of the target value due to Level 3 attributable grounds, Customer will be entitled to request a credit of the applicable MRC of the affected site as detailed in the table below.

Average Jitter Deviation based on targets described in Section 3.3.5	**Jitter Credits (Percentage on the MRC applied for a given site port)**
0% to +10%	**0%**
+11% to +30%	**5%**
Above +31%	**10%**

[SO7]

- If average Jitter deviation for a given pair of Level 3PoP's or VPOPs affects more than one On-Net or VPOP connected Customer Site (as defined in Section 6), with Level 3 managed CPE's, only one credit per Service shall apply. Service credit is calculated on the Customer Site with the highest monthly recurring charge per port compared with all the Customer Sites affected by the same pair of Level 3PoP's or VPOPs. Credit for Service shall abide by the terms and conditions specified in Section 5 hereunder.

- Exclusions: Jitter Service failures due to re-routings derived from backbone outages, shall be excluded for credit calculation purposes.

4. Level 3 Limitation of Liability

~~Level 3 shall only provide Customer with the Service with the characteristics and scope as expressly described hereunder. In no event shall Level 3 guarantee the existence of Internet Services or Networks provided by third parties; nor use or access availability to different Internet Services provided by third parties. Such third party vendors shall be entirely and solely responsible for the services they provide.~~

[SO8]**Meeting 20 Feb.13: Level 3: OK to delete Article 4.**

5. General Terms applying to SLAsMeeting 20 Feb.13: Level 3:

Article 5 of this SLA compliments the technical specification, Section C, Article 5.13. In case of discrepancies, ICAO's specification shall prevail.

5.1 Level 3 owns a Latin America Regional Operations Center (LROC) to provide monitoring, failures reports and Level 3 Data Service maintenance on a 24x7x365 basis.

5.2 Level 3 and Customer shall work in tandem to repair any Service flaw, as described below:

- Customer shall report to Level 3 about the existence of any trouble by opening a trouble ticket through LROC.

- Level 3 shall then verify the existence of such a Service failure and shall execute all necessary activities to confirm that failure was the result of an action or omission of its own resources or Level 3 outsourced resources to provide Service.

5.3 Level 3 Mean Time To Restore (MTTR) target is of four (4) hours for Customer Sites located less than 50km away from On-Net and VPOPs sites; an of eight (8) hours for the rest. Level 3 shall make all reasonable technical efforts to trouble-shoot Service troubles reported by Customers within the aforementioned timelines through the LROC (Latin American Regional Operation Center) upon trouble ticket opening. Level 3 will review the reported trouble and provide Customer with a diagnosis, as part of the trouble shooting process.

5.4 Trouble ticket will be closed upon Service restoration and upon acceptance by both Level 3 and Customer.

5.5 MTTR values detailed above shall apply only to On-Net Customer Sites (defined in Section 6).

5.6 This SLA and Service credits cover both Level 3 owned circuits as well as those directly under Level 3 control. Any part of the Service provided to Customer by third parties, and used together with Level 3 for service provision purposes are considered beyond Level 3 service control, and therefore are not covered by the objectives and credits applicable to this Service.

5.7 SLA credits are calculated after deduction of all discounts and other special pricing arrangements, and are not applied to governmental fees, taxes, surcharges and similar additional charges.

5.8 If an incident affects the performance of the Service and results in a period of Service Unavailability, entitling Customer to one or more credits under different SLA parameters, only the single highest credit applying in respect of that incident will be applied.

5.9 In no event will SLA credits in any calendar month exceed 30% of the total MRCs payable by Customer for the applicable Converged Connection Type in that month. In no event will maximum applicable credits in any calendar month for a given Site exceed thirty percent (30%) of the MRCs for that site.

5.10 All approved SLA credits for a given month will be totaled and applied to Customer's next following invoice for the Service, or as promptly thereafter as is practical in the event of a dispute. SLA credits must be requested within 30 calendar days of the end of the month in which entitlement to an SLA credit arose. Should Customer fail to give notice to Level 3 within said period, Level 3 shall be relieved from liability whatsoever.

5.11 SLAs apply to newly installed Services and to Service reconfigurations requested by Customer commencing on the next calendar day following (i) the Service Commencement Date or (ii) completion of the Service reconfiguration, as applicable.

5.12 SLA credits and/or termination rights provided for in these terms and conditions are Customer's exclusive remedies with respect to items covered in these terms and conditions and the sole responsibility of Level 3.

5.13 SLA credits are not payable on the basis of incomplete or inaccurate reporting of compliance with SLA metrics caused by inaccurate or incomplete configuration information provided by Customer.

5.14 Except where specifically provided for in these terms and conditions, no service level guarantees apply to Customer traffic while it is being carried / transmitted on third party networks.

5.15 No SLA credit shall apply to the failure of the Service to comply with an SLA, or to any period of Network or Service Unavailability, caused, in whole or part, by any of the following:

- a failure of Customer's premises equipment or equipment of a Customer's vendor;
- power failure at the Customer's premises;
- a failure in local access facilities connecting the Customer to Level 3's network which are <u>not</u> provided by Level 3;
- force majeure or act of god events as defined under the Contract, including failures caused by undersea cables cuts that connect the VPOPs;

- any act or omission of Customer or any third party (including but not limited to, Customer's agents, contractors or vendors), including, but not limited to (i) failing to provide Level 3 adequate access to facilities for testing, (ii) failing to provide access to Customer premises as reasonably required by Level 3 (or its agents) to enable Level 3 to comply with its obligations regarding the Service, (iii) failing to take any remedial action in relation to a Service as recommended by Level 3, or otherwise preventing Level 3 from doing so, or (iv) any act or omission which causes Level 3 to be unable to meet any of the SLAs;
- customer's negligence or willful misconduct, which may include Customer's failure to follow agreed-upon procedures;
- Over delivery of traffic to individual IP VPN ~~or DIA~~ ports which either exceeds the bandwidth for individual CoS allocations or attempts to exceed the overall bandwidth available for the applicable port;
- Subject to Section 4.1.2 above, any scheduled maintenance periods when Customer has been informed of such maintenance, and emergency maintenance; or
- disconnection or suspension of the Service by Level 3 pursuant to a right to do so under the Contract or these terms and conditions[SO9]

6. On Net Sites

6.1 To the purposes of this SLA, On Net Locations are those Customer Sites located in the cities described below (Level 3 may modify this list at any time):

Country	City
Argentina	Buenos Aires, Rosario, Córdoba, Mendoza
Brazil	Sao Paulo, Río de Janeiro, Belo Horizonte, Curitiba
USA	Miami
Colombia	Bogotá, Cali, Medellin
Venezuela	Caracas
Ecuador	Quito, Guayaquil
Chile	Santiago
Peru	Lima

6.2 Level 3 POPs

For the purposes of this SLA we have included Level 3PoPs (Level 3 may modify this list at any time):

Country	City
Argentina	Buenos Aires
Brazil	Sao Paulo
USA	Miami
Colombia	Bogotá
Venezuela	Caracas
Ecuador	Quito
Chile	Santiago
Peru	Lima

6.3 Level 3 VPOPs

The list below contains Level 3 VPOPs for the effects hereunder (Level 3 may modify this list at any time):

Country	City
Dominican Republic	Santo Domingo
Puerto Rico	San Juan
Jamaica	Kingston
Trinidad & Tobago	port of Spain
Bahamas	Nassau
Guatemala	Guatemala
Honduras	Tegucigalpa
El Salvador	San Salvador
Nicaragua	Managua
Costa Rica	San José

Customer's Full Name _____ Contract Execution Date _____

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APPENDIX B / APENDICE B

REDDIG II FOCAL POINTS / PUNTOS FOCALES REDDIG II

STATE / ESTADO	Name / Nombre	Cargo	E-Mail / Correo-e	Telephone / Teléfono	Address / Dirección
ARG	Moira Lidia Callegare, ANAC	Jefe Departamento Proyectos – DNSA	mcallegare@anac.gov.ar	(5411) 594-13097	Edificio ANAC Central Paseo Colón 1452, Ciudad Autónoma de Buenos Aires, CP 1063
	Sergio Vallone, ANAC		svallone@anac.gov.ar	(54351) 475-6414	Dirección Regional Noroeste Camino Pajas Blancas Km. 8.5, CP 5000, Córdoba Capital
	Obdulio Gouarnalusse, FFAA	Jefe Departamento de Proyectos	ogouarna@faa.mil.ar; ogouarnalusse@gmail.com	(5411) 4480-2362; (5411) 5166-2362	Aeropuerto Internacional Ministro Pistarini (Ezeiza), Edificio Regional Central, 4° piso CECODI
	Javier Vittor, FFAA	Jefe Centro Comunicaciones Digitales Ezeiza	jvittor@anac.gov.ar	(5411) 4480-2362; (5411) 5166-2362	Aeropuerto Internacional Ministro Pistarini (Ezeiza), Edificio Regional Central, 4° piso CECODI
BRA	Athayde Licério Frauche		ddte3@decea.gov.br	(5541) 3251-5315; (5541) 3251-5341; (5541) 3251-5318	Av. Erasto Gaertner, 1000, CEP 82515-000, Curitiba, PR, Brasil
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