

# ISO/IEC 13873:2003-04 (E)

Information technology — Telecommunications and information exchange between systems —  
Private Integrated Services Network — Inter-exchange signalling protocol —  
Call Diversion supplementary services

---

## Contents

Foreword	v
Introduction	vi
1 Scope	1
2 Conformance	1
3 Normative references	1
4 Terms and definitions	2
4.1 External definitions	2
4.2 Other definitions	3
4.2.1 Activating PINX	3
4.2.2 Busy	3
4.2.3 Connected number	3
4.2.4 Deactivating PINX	3
4.2.5 Diversion	3
4.2.6 Diverted-to number	3
4.2.7 Diverted-to PINX	3
4.2.8 Diverted-to user	3
4.2.9 Diverting cause	3
4.2.10 Diverting number	3
4.2.11 Forwarding	3
4.2.12 Forward switching	3
4.2.13 Interrogating PINX	3
4.2.14 Last diverting user	3
4.2.15 Original called number	3
4.2.16 Original called user	3
4.2.17 Partial rerouteing	4
4.2.18 Presentation indicator	4
4.2.19 Rerouteing	4
4.2.20 Rerouteing PINX	4
4.2.21 Served user	4
4.2.22 User A	4
4.2.23 User B	4
4.2.24 User B1, user B2, user B3, etc.	4
4.2.25 User C	4
5 Acronyms	4
6 Signalling protocol for the support of SS-DIV	5
6.1 SS-DIV description	5
6.2 SS-DIV operational requirements	5
6.2.1 Provision/withdrawal	5
6.2.2 Requirements on the Originating PINX	6
6.2.3 Requirements on the Served User PINX	6
6.2.4 Requirements on the Diverted-to PINX	6
6.2.5 Requirements on the Rerouteing PINX	6
6.2.6 Requirements on a Transit PINX	6
6.2.7 Requirements on the Activating PINX	7
6.2.8 Requirements on the Deactivating PINX	7
6.2.9 Requirements on the Interrogating PINX	7

<b>6.3</b>	<b>SS-DIV coding requirements</b>	
<b>6.3.1</b>	<b>Operations</b>	
<b>6.3.2</b>	<b>Information elements</b>	<b>14</b>
<b>6.3.3</b>	<b>Messages</b>	<b>14</b>
<b>6.4</b>	<b>SS-DIV state definitions</b>	<b>14</b>
<b>6.4.1</b>	<b>States at the Originating PINX</b>	<b>14</b>
<b>6.4.2</b>	<b>States at the Served User PINX</b>	<b>14</b>
<b>6.4.3</b>	<b>States at the Diverted-to PINX</b>	<b>15</b>
<b>6.4.4</b>	<b>States at the Rerouteing PINX</b>	<b>15</b>
<b>6.4.5</b>	<b>States at the Activating PINX</b>	<b>15</b>
<b>6.4.6</b>	<b>States at the Deactivating PINX</b>	<b>15</b>
<b>6.4.7</b>	<b>States at the Interrogating PINX</b>	<b>15</b>
<b>6.5</b>	<b>SS-DIV Signalling procedures</b>	<b>15</b>
<b>6.5.1</b>	<b>Actions at the Originating PINX</b>	<b>15</b>
<b>6.5.2</b>	<b>Actions at a Transit PINX</b>	<b>16</b>
<b>6.5.3</b>	<b>Actions at the Served User PINX</b>	<b>16</b>
<b>6.5.4</b>	<b>Actions at the Rerouteing PINX</b>	<b>19</b>
<b>6.5.5</b>	<b>Actions at the Diverted-to PINX</b>	<b>21</b>
<b>6.5.6</b>	<b>Actions at the Activating PINX</b>	<b>21</b>
<b>6.5.7</b>	<b>Actions at the Deactivating PINX</b>	<b>22</b>
<b>6.5.8</b>	<b>Actions at the Interrogating PINX</b>	<b>22</b>
<b>6.6</b>	<b>SS-DIV Impact of interworking with public ISDNs</b>	<b>22</b>
<b>6.6.1</b>	<b>Impact of interworking on incoming calls</b>	<b>23</b>
<b>6.6.2</b>	<b>Impact of interworking on outgoing calls</b>	<b>23</b>
<b>6.7</b>	<b>SS-DIV Impact of interworking with non-ISDNs</b>	<b>23</b>
<b>6.7.1</b>	<b>Impact of interworking on incoming calls</b>	<b>23</b>
<b>6.7.2</b>	<b>Impact of interworking on outgoing calls</b>	<b>24</b>
<b>6.8</b>	<b>Protocol interactions between SS-DIV and other SSs and ANFs</b>	<b>24</b>
<b>6.8.1</b>	<b>Protocol interactions of Call Forwarding Unconditional (SS-CFU)</b>	<b>24</b>
<b>6.8.2</b>	<b>Protocol interactions of Call Forwarding Busy (SS-CFB)</b>	<b>25</b>
<b>6.8.3</b>	<b>Protocol interactions of Call Forwarding No Reply (SS-CFNR)</b>	<b>26</b>
<b>6.8.4</b>	<b>Protocol interactions of Call Deflection (SS-CD)</b>	<b>28</b>
<b>6.9</b>	<b>SS-DIV parameter values (timers)</b>	<b>28</b>
<b>6.9.1</b>	<b>Timer T1</b>	<b>28</b>
<b>6.9.2</b>	<b>Timer T2</b>	<b>28</b>
<b>6.9.3</b>	<b>Timer T3</b>	<b>28</b>
<b>6.9.4</b>	<b>Timer T4</b>	<b>28</b>
<b>6.9.5</b>	<b>Timer T5</b>	<b>28</b>
<b>Annexes</b>		
<b>A</b>	<b>Protocol Implementation Conformance Statement (PICS) proforma</b>	<b>29</b>
<b>B</b>	<b>Imported ASN.1 definitions</b>	<b>40</b>
<b>C</b>	<b>Specification and Description Language (SDL) representation of procedures</b>	<b>41</b>
<b>D</b>	<b>Examples of message sequences</b>	<b>55</b>
<b>E</b>	<b>Bibliography</b>	<b>67</b>
<b>F</b>	<b>ASN.1 definitions according to ITU-T Recs. X.208 / X.209</b>	<b>68</b>