

# ISO 14223-1:2011-04 (E)

## Radiofrequency identification of animals - Advanced transponders - Part 1: Air interface

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Conformance .....</b>	<b>1</b>
3.1	Transponder .....	1
3.2	Transceiver .....	1
<b>4</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>5</b>	<b>Abbreviated terms .....</b>	<b>4</b>
<b>6</b>	<b>Symbols .....</b>	<b>4</b>
<b>7</b>	<b>General requirements .....</b>	<b>6</b>
<b>8</b>	<b>FDX-ADV transponder .....</b>	<b>6</b>
8.1	FDX-ADV down-link description .....	6
8.2	FDX-ADV transponder -- Mode-switching protocol .....	7
8.3	Down-link communication signal interface -- Transceiver to transponder .....	8
8.4	Communication signal interface -- Transponder to transceiver .....	11
<b>9</b>	<b>HDX-ADV transponder .....</b>	<b>12</b>
9.1	Transponder charge and recharge times .....	12
9.2	HDX-ADV down-link description .....	13
9.3	HDX-ADV -- Mode switching protocol .....	14
9.4	Down-link communication signal interface -- Transceiver to HDX-ADV transponder .....	14
9.5	Communication signal interface -- Transponder to transceiver .....	16
<b>10</b>	<b>General protocol timing specification .....</b>	<b>18</b>
10.1	General considerations .....	18
10.2	FDX-ADV transponder .....	18
10.3	HDX-ADV transponder .....	20
<b>Annex A (informative) Synchronisation of advanced transceivers .....</b>		<b>23</b>
<b>Annex B (informative) FDX-ADV and HDX-ADV down-link interfaces .....</b>		<b>25</b>