

Supplement number [] to the 2006 ISDA Definitions
(published [], 2019)

Section 7.1 Rate Options.

- a) Section 7.1(f)(viii) is amended by deleting it in its entirety and replacing it with the following:

“EUR-EONIA-OIS-COMPOUND” means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is the Euro Overnight Index Average (EONIA)), provided that the rate for each day in a Calculation Period occurring on or after an EONIA Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EuroSTR_i.

Upon the occurrence of a EuroSTR Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the EuroSTR Index Cessation Effective Date will be determined as if references to EONIA_i were references to the ECB Recommended Rate_i.

If:

- (a) no such rate is recommended before the end of the first TARGET Settlement Day following the day on which the EuroSTR Index Cessation Event occurs, then the rate for each day in a Calculation Period occurring on or after the EuroSTR Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EDFR (EONIA)_i; or
- (b) an ECB Recommended Rate Index Cessation Event subsequently occurs, then the rate for each day in a Calculation Period occurring on or after the ECB Recommended Rate Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EDFR (EONIA)_i.

“EUR-EONIA-OIS-COMPOUND” will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a), but to the nearest one ten-thousandth of a percentage point (0.0001%):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{\text{EONIA}_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

“d₀”, for any Calculation Period, is the number of TARGET Settlement Days in the relevant Calculation Period;

“i” is a series of whole numbers from one to d_0 , each representing the relevant TARGET Settlement Days in chronological order from, and including, the first TARGET Settlement Day in the relevant Calculation Period;

“EONIA_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to the overnight rate appearing on the Reuters Screen EONIA Page in respect of that day;

“n_i” is the number of calendar days in the relevant Calculation Period on which the rate is EONIA_i;¹

“d” is the number of calendar days in the relevant Calculation Period;

“EONIA Index Cessation Event” means:

- (a) the announcement by the European Money Markets Institute on 31 May 2019 that EONIA would be discontinued on 3 January 2022; or
- (b) the occurrence of any of the following events:
 - (i) a public statement or publication of information by or on behalf of the European Money Markets Institute (or a successor administrator of EONIA) announcing that it has ceased or will cease to provide EONIA permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EONIA; or
 - (ii) a public statement or publication of information by the regulatory supervisor for the administrator of EONIA, the central bank for the currency of EONIA, an insolvency official with jurisdiction over the administrator of EONIA, a resolution authority with jurisdiction over the administrator of EONIA or a court or an entity with similar insolvency or resolution authority over the administrator of EONIA, which states that the administrator of EONIA has ceased or will cease to provide EONIA permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EONIA;

“EONIA Index Cessation Effective Date” means, in respect of an EONIA Index Cessation Event, the first date on which EONIA is no longer provided;

“Modified EuroSTR_i” means for any day “i” in the relevant Calculation Period, a reference rate equal to EuroSTR in respect of that day as published on the ECB’s Website plus 0.085%;

“EuroSTR” is the euro short term rate (€STR) provided by the European Central Bank as administrator of the benchmark (or a successor administrator) on the ECB’s Website;

“EuroSTR Index Cessation Event” means the occurrence of one or more of the following events:

¹ Period End Dates should be made subject to adjustment in accordance with an appropriate Business Day Convention to ensure interest accrues in respect of all calendar days in a Calculation Period. Note that interest will accrue but not compound on non-TARGET Settlement Days.

- (a) a public statement or publication of information by or on behalf of the European Central Bank (or a successor administrator of EuroSTR) announcing that it has ceased or will cease to provide EuroSTR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EuroSTR; or
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of EuroSTR, the central bank for the currency of EuroSTR, an insolvency official with jurisdiction over the administrator of EuroSTR, a resolution authority with jurisdiction over the administrator of EuroSTR or a court or an entity with similar insolvency or resolution authority over the administrator of EuroSTR, which states that the administrator of EuroSTR has ceased or will cease to provide EuroSTR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EuroSTR;

“EuroSTR Index Cessation Effective Date” means, in respect of a EuroSTR Index Cessation Event, the first date on which EuroSTR is no longer provided;

“ECB Recommended Rate_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to the ECB Recommended Rate in respect of that day, as published or provided by the administrator thereof, plus 0.085%;

“ECB Recommended Rate” means the rate (inclusive of any spreads or adjustments) recommended as the replacement for EuroSTR by the European Central Bank (or any successor administrator of EuroSTR) and/or by a committee officially endorsed or convened by the European Central Bank (or any successor administrator of EuroSTR) for the purpose of recommending a replacement for EuroSTR (which rate may be produced by the European Central Bank or another administrator);

“ECB Recommended Rate Index Cessation Event” means the occurrence of one or more of the following events:

- (a) a public statement or publication of information by or on behalf of the administrator of the ECB Recommended Rate announcing that it has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the ECB Recommended Rate; or
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of the ECB Recommended Rate, the central bank for the currency of the ECB Recommended Rate, an insolvency official with jurisdiction over the administrator of the ECB Recommended Rate, a resolution authority with jurisdiction over the administrator of the ECB Recommended Rate or a court or an entity with similar insolvency or resolution authority over the administrator of the ECB Recommended Rate, which states that the administrator of the ECB Recommended Rate has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that,

at the time of the statement or publication, there is no successor administrator that will continue to provide the ECB Recommended Rate;

“ECB Recommended Rate Index Cessation Effective Date” means, in respect of an ECB Recommended Rate Index Cessation Event, the first date on which the ECB Recommended Rate is no longer provided;

“Modified EDFR (EONIA)_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to Modified EDFR (EONIA) in respect of that day plus 0.085%;

“Modified EDFR (EONIA)” means the Eurosystem Deposit Facility Rate, as published or provided by the administrator thereof, plus the EDFR Spread;

“Eurosystem Deposit Facility Rate” means the rate on the deposit facility, which banks may use to make overnight deposits with the Eurosystem and which is published on the ECB’s Website; and

“EDFR Spread” means:

- (a) if no ECB Recommended Rate is recommended before the end of the first TARGET Settlement Day following the day on which the EuroSTR Index Cessation Event occurs, the arithmetic mean of the daily difference between EuroSTR and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the EuroSTR Index Cessation Event occurs and ending on the TARGET Settlement Day immediately preceding the day on which the EuroSTR Index Cessation Event occurs; or
- (b) if an ECB Recommended Rate Index Cessation Event occurs, the arithmetic mean of the daily difference between the ECB Recommended Rate and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the ECB Recommended Rate Index Cessation Event occurs and ending on the TARGET Settlement Day immediately preceding the day on which the ECB Recommended Rate Index Cessation Event occurs.

- b) Section 7.1(f)(ix) is amended by deleting it in its entirety and replacing it with the following:

“EUR-EONIA-OIS-COMPOUND-Bloomberg” means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is the Euro Overnight Index Average (EONIA)), provided that the rate for each day in a Calculation Period occurring on or after an EONIA Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EuroSTR_i.

Upon the occurrence of a EuroSTR Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the EuroSTR Index Cessation Effective Date will be determined as if references to EONIA_i were references to the ECB Recommended Rate_i.

If:

- (a) no such rate is recommended before the end of the first TARGET Settlement Day following the day on which the EuroSTR Index Cessation Event occurs, then the rate for each day in a Calculation Period occurring on or after the EuroSTR Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EDFR (EONIA)_i; or
- (b) an ECB Recommended Rate Index Cessation Event subsequently occurs, then the rate for each day in a Calculation Period occurring on or after the ECB Recommended Rate Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EDFR (EONIA)_i.

“EUR-EONIA-OIS-COMPOUND-Bloomberg” will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a), but to the nearest one ten-thousandth of a percentage point (0.0001%):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{\text{EONIA}_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

“d₀”, for any Calculation Period, is the number of TARGET Settlement Days in the relevant Calculation Period;

“i” is a series of whole numbers from one to d₀, each representing the relevant TARGET Settlement Days in chronological order from, and including, the first TARGET Settlement Day in the relevant Calculation Period;

“EONIA_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to the overnight rate appearing on the Bloomberg Screen ALLX EBFS Page in respect of that day;

“ n_i ” is the number of calendar days in the relevant Calculation Period on which the rate is EONIA;¹

“ d ” is the number of calendar days in the relevant Calculation Period;

“EONIA Index Cessation Event” means:

- (a) the announcement by the European Money Markets Institute on 31 May 2019 that EONIA would be discontinued on 3 January 2022; or
- (b) the occurrence of any of the following events:
 - (i) a public statement or publication of information by or on behalf of the European Money Markets Institute (or a successor administrator of EONIA) announcing that it has ceased or will cease to provide EONIA permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EONIA; or
 - (ii) a public statement or publication of information by the regulatory supervisor for the administrator of EONIA, the central bank for the currency of EONIA, an insolvency official with jurisdiction over the administrator of EONIA, a resolution authority with jurisdiction over the administrator of EONIA or a court or an entity with similar insolvency or resolution authority over the administrator of EONIA, which states that the administrator of EONIA has ceased or will cease to provide EONIA permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EONIA;

“EONIA Index Cessation Effective Date” means, in respect of an EONIA Index Cessation Event, the first date on which EONIA is no longer provided;

“Modified EuroSTR _{i} ” means for any day “ i ” in the relevant Calculation Period, a reference rate equal to EuroSTR in respect of that day as published on the ECB’s Website plus 0.085%;

“EuroSTR” is the euro short term rate (€STR) provided by the European Central Bank as administrator of the benchmark (or a successor administrator) on the ECB’s Website;

“EuroSTR Index Cessation Event” means the occurrence of one or more of the following events:

- (a) a public statement or publication of information by or on behalf of the European Central Bank (or a successor administrator of EuroSTR) announcing that it has ceased or will cease to provide EuroSTR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EuroSTR; or

¹ Period End Dates should be made subject to adjustment in accordance with an appropriate Business Day Convention to ensure interest accrues in respect of all calendar days in a Calculation Period. Note that interest will accrue but not compound on non-TARGET Settlement Days.

- (b) a public statement or publication of information by the regulatory supervisor for the administrator of EuroSTR, the central bank for the currency of EuroSTR, an insolvency official with jurisdiction over the administrator of EuroSTR, a resolution authority with jurisdiction over the administrator of EuroSTR or a court or an entity with similar insolvency or resolution authority over the administrator of EuroSTR, which states that the administrator of EuroSTR has ceased or will cease to provide EuroSTR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EuroSTR;

“EuroSTR Index Cessation Effective Date” means, in respect of a EuroSTR Index Cessation Event, the first date on which EuroSTR is no longer provided;

“ECB Recommended Rate_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to the ECB Recommended Rate in respect of that day, as published or provided by the administrator thereof, plus 0.085%;

“ECB Recommended Rate” means the rate (inclusive of any spreads or adjustments) recommended as the replacement for EuroSTR by the European Central Bank (or any successor administrator of EuroSTR) and/or by a committee officially endorsed or convened by the European Central Bank (or any successor administrator of EuroSTR) for the purpose of recommending a replacement for EuroSTR (which rate may be produced by the European Central Bank or another administrator);

“ECB Recommended Rate Index Cessation Event” means the occurrence of one or more of the following events:

- (a) a public statement or publication of information by or on behalf of the administrator of the ECB Recommended Rate announcing that it has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the ECB Recommended Rate; or
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of the ECB Recommended Rate, the central bank for the currency of the ECB Recommended Rate, an insolvency official with jurisdiction over the administrator of the ECB Recommended Rate, a resolution authority with jurisdiction over the administrator of the ECB Recommended Rate or a court or an entity with similar insolvency or resolution authority over the administrator of the ECB Recommended Rate, which states that the administrator of the ECB Recommended Rate has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the ECB Recommended Rate;

“ECB Recommended Rate Index Cessation Effective Date” means, in respect of an ECB Recommended Rate Index Cessation Event, the first date on which the ECB Recommended Rate is no longer provided;

“Modified EDFR (EONIA)_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to Modified EDFR (EONIA) in respect of that day plus 0.085%;

“Modified EDFR (EONIA)” means the Eurosystem Deposit Facility Rate, as published or provided by the administrator thereof, plus the EDFR Spread;

“Eurosystem Deposit Facility Rate” means the rate on the deposit facility, which banks may use to make overnight deposits with the Eurosystem and which is published on the ECB’s Website; and

“EDFR Spread” means:

- (a) if no ECB Recommended Rate is recommended before the end of the first TARGET Settlement Day following the day on which the EuroSTR Index Cessation Event occurs, the arithmetic mean of the daily difference between EuroSTR and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the EuroSTR Index Cessation Event occurs and ending on the TARGET Settlement Day immediately preceding the day on which the EuroSTR Index Cessation Event occurs; or
- (b) if an ECB Recommended Rate Index Cessation Event occurs, the arithmetic mean of the daily difference between the ECB Recommended Rate and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the ECB Recommended Rate Index Cessation Event occurs and ending on the TARGET Settlement Day immediately preceding the day on which the ECB Recommended Rate Index Cessation Event occurs.

- c) Section 7.1(f)(xi) is amended by deleting it in its entirety and replacing it with the following:

“EUR-EONIA-AVERAGE” means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the average monthly rate of the day-to-day Euro Overnight Index Average (EONIA), adjusted to take into account the exact number of days in the month concerned, provided that the rate for each day in a Calculation Period occurring on or after an EONIA Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EuroSTR_i.

Upon the occurrence of a EuroSTR Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the EuroSTR Index Cessation Effective Date will be determined as if references to EONIA_i were references to the ECB Recommended Rate_i.

If:

- (a) no such rate is recommended before the end of the first TARGET Settlement Day following the day on which the EuroSTR Index Cessation Event occurs, then the rate for each day in a Calculation Period occurring on or after the EuroSTR Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EDNR (EONIA)_i; or
- (b) an ECB Recommended Rate Index Cessation Event subsequently occurs, then the rate for each day in a Calculation Period occurring on or after the ECB Recommended Rate Index Cessation Effective Date will be determined as if references to EONIA_i were references to Modified EDNR (EONIA)_i.

Meanings for certain terms relevant to this Floating Rate Option shall be as specified in Exhibit III to these 2006 Definitions.

“EUR-EONIA-AVERAGE” will be calculated as follows:

$$\frac{100}{D} \times \left[\sum_{i=1}^{i=D} \text{EONIA}_i \right]$$

where:

“EONIA_i”, for any relevant day “i” in the month of the Calculation Period, is a reference rate equal to the overnight rate appearing on the Reuters Screen EONIA Page in respect of that day, if that day is a TARGET Settlement Day, or in respect of the TARGET Settlement Day immediately preceding that day, if that day is not a TARGET Settlement Day;

“D”, for the month of the Calculation Period, is the number of calendar days in that month;

“i” is a series of whole numbers from one to D, each representing in the month of the Calculation Period the relevant calendar days in that month in chronological order from, and including, the first day of that month to, and including, the last day of that month;

“EONIA Index Cessation Event” means:

- (a) the announcement by the European Money Markets Institute on 31 May 2019 that EONIA would be discontinued on 3 January 2022; or
- (b) the occurrence of any of the following events:
 - (i) a public statement or publication of information by or on behalf of the European Money Markets Institute (or a successor administrator of EONIA) announcing that it has ceased or will cease to provide EONIA permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EONIA; or
 - (ii) a public statement or publication of information by the regulatory supervisor for the administrator of EONIA, the central bank for the currency of EONIA, an insolvency official with jurisdiction over the administrator of EONIA, a resolution authority with jurisdiction over the administrator of EONIA or a court or an entity with similar insolvency or resolution authority over the administrator of EONIA, which states that the administrator of EONIA has ceased or will cease to provide EONIA permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EONIA;

“EONIA Index Cessation Effective Date” means, in respect of an EONIA Index Cessation Event, the first date on which EONIA is no longer provided;

“Modified EuroSTR_i” means for any day “i” in the relevant Calculation Period, a reference rate equal to EuroSTR in respect of that day, if that day is a TARGET Settlement Day, or in respect of the TARGET Settlement Day immediately preceding that day, if that day is not a TARGET Settlement Day, as published on the ECB’s Website, plus 0.085%;

“EuroSTR” is the euro short term rate (€STR) provided by the European Central Bank as administrator of the benchmark (or a successor administrator) on the ECB’s Website;

“EuroSTR Index Cessation Event” means the occurrence of one or more of the following events:

- (a) a public statement or publication of information by or on behalf of the European Central Bank (or a successor administrator of EuroSTR) announcing that it has ceased or will cease to provide EuroSTR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EuroSTR; or
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of EuroSTR, the central bank for the currency of EuroSTR, an insolvency

official with jurisdiction over the administrator of EuroSTR, a resolution authority with jurisdiction over the administrator of EuroSTR or a court or an entity with similar insolvency or resolution authority over the administrator of EuroSTR, which states that the administrator of EuroSTR has ceased or will cease to provide EuroSTR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EuroSTR;

“EuroSTR Index Cessation Effective Date” means, in respect of a EuroSTR Index Cessation Event, the first date on which EuroSTR is no longer provided;

“ECB Recommended Rate_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to the ECB Recommended Rate in respect of that day, if that day is a TARGET Settlement Day, or in respect of the TARGET Settlement Day immediately preceding that day, if that day is not a TARGET Settlement Day, as published or provided by the administrator thereof, plus 0.085%;

“ECB Recommended Rate” means the rate (inclusive of any spreads or adjustments) recommended as the replacement for EuroSTR by the European Central Bank (or any successor administrator of EuroSTR) and/or by a committee officially endorsed or convened by the European Central Bank (or any successor administrator of EuroSTR) for the purpose of recommending a replacement for EuroSTR (which rate may be produced by the European Central Bank or another administrator);

“ECB Recommended Rate Index Cessation Event” means the occurrence of one or more of the following events:

- (a) a public statement or publication of information by or on behalf of the administrator of the ECB Recommended Rate announcing that it has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the ECB Recommended Rate; or
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of the ECB Recommended Rate, the central bank for the currency of the ECB Recommended Rate, an insolvency official with jurisdiction over the administrator of the ECB Recommended Rate, a resolution authority with jurisdiction over the administrator of the ECB Recommended Rate or a court or an entity with similar insolvency or resolution authority over the administrator of the ECB Recommended Rate, which states that the administrator of the ECB Recommended Rate has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the ECB Recommended Rate;

“ECB Recommended Rate Index Cessation Effective Date” means, in respect of an ECB Recommended Rate Index Cessation Event, the first date on which the ECB Recommended Rate is no longer provided;

“Modified EDFR (EONIA)_i”, for any day “i” in the relevant Calculation Period, is a reference rate equal to Modified EDFR (EONIA) in respect of that day, if that day is a TARGET Settlement Day, or in respect of the TARGET Settlement Day immediately preceding that day, if that day is not a TARGET Settlement Day, plus 0.085%;

“Modified EDFR (EONIA)” means the Eurosystem Deposit Facility Rate, as published or provided by the administrator thereof, plus the EDFR Spread;

“Eurosystem Deposit Facility Rate” means the rate on the deposit facility, which banks may use to make overnight deposits with the Eurosystem and which is published on the ECB’s Website; and

“EDFR Spread” means:

- (a) if no ECB Recommended Rate is recommended before the end of the first TARGET Settlement Day following the day on which the EuroSTR Index Cessation Event occurs, the arithmetic mean of the daily difference between EuroSTR and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the EuroSTR Index Cessation Event occurs and ending on the TARGET Settlement Day immediately preceding the day on which the EuroSTR Index Cessation Event occurs; or
- (b) if an ECB Recommended Rate Index Cessation Event occurs, the arithmetic mean of the daily difference between the ECB Recommended Rate and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the ECB Recommended Rate Index Cessation Event occurs and ending on the TARGET Settlement Day immediately preceding the day on which the ECB Recommended Rate Index Cessation Event occurs.