

**Deutsche Bank AG - India Branches**  
(Incorporated in Germany with limited liability)

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**1. Scope of application**

The BASEL III - Pillar 3 disclosures contained herein relate to Deutsche Bank AG, India Branches (herein also referred to as the 'Bank') for the period ended June 30, 2016. These are compiled in accordance with the Reserve Bank of India (the 'RBI') Master Circular – Basel III Capital regulation DBR.No.BP.BC.1/21.06.201/2015-16 dated July 1, 2015 and the amendments thereto issued from time to time.

As at June 30, 2016, the Bank is required to maintain minimum CET1 capital ratio of 5.50%, Capital conservation buffer (CCB) of 0.625%, Global Systemically Important Banks buffer (GSIB) of 0.50%, minimum Tier-1 capital ratio of 7% and minimum total capital ratio including CCB and GSIB is 10.125%.

The following table lists Bank's associates consolidated for preparation of the consolidated financial statements and their treatment in consolidated capital adequacy computations.

Name of the entity	Included under accounting scope of consolidation	Method of accounting consolidation	Included under regulatory scope of consolidation	Method of regulatory consolidation	Reasons for difference in the method of consolidation	Reasons for consolidation under one of the scope of consolidation
Comfund Consulting Limited	Yes	Consolidated as per AS 23	No	Not Applicable	Not Applicable	Risk weighted for capital adequacy purposes

List of Group entities operating in India and considered for regulatory scope of consolidation is as under. The bank does not hold any investment in the group entities.

(In Rs '000)

Sr. No.	Name of entity	Principal activity of the entity	Total balance sheet equity*	Total balance sheet assets*
1	Deutsche India Holdings Private Limited (DIHPL)	Holding company	4,913,885	4,916,510
2	Deutsche Investments India Private Limited (DI IPL)	Loans and advances / Portfolio management	8,951,400	24,319,200

\* Figures as per audited accounts of March 31, 2016

List of Group entities operating in India and not considered for consolidation both under accounting and regulatory scope of consolidation is as under. The bank does not hold any investment in the group entities.

(In Rs '000)

Sr. No.	Name of entity	Principal activity of the entity	Total balance sheet equity*	Total balance sheet assets*
1	Deutsche Asset Management (India) Private Limited	Asset management / Portfolio Management <sup>§</sup>	836,191	1,354,915
2	Deutsche Securities (India) Private Limited	Securities and debt trading and primary dealership <sup>#</sup>	751,917	824,721
3	Deutsche Equities India Private Limited	Stock broker / Merchant banking and advisory services	2,553,600	21,070,500
4	Deutsche Investor Services Private Limited	Fund accounting	225,530	404,893
5	RREEF India Advisors Private Limited	Sub advisory services <sup>#</sup>	208,774	212,848
6	Deutsche Trustee Services (India) Private Limited	Act as Trustees of all schemes launched by Deutsche Mutual funds <sup>#</sup>	67,983	74,241
7	Deutsche CIB Centre Private Limited	Global processing centre for Back office processing / support services for business lines.	3,587,400	4,606,700
8	DBOI Global Services Private Limited	Global processing centre for back office / IT enabled services	5,742,300	8,493,300

\* Figures as per audited accounts of March 31, 2016

# The members have passed a resolution for voluntary winding up

§ Consequent upon the transfer of schemes of Deutsche Mutual Fund, the company does not carry on any operations

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**2. Capital Structure**

**a. Summary information on the terms and conditions of the main features of all capital instruments**

CET1 and Tier I Capital primarily comprises of interest free capital received from the Head Office, balance in statutory reserves, capital reserves and remittable surplus retained for CRAR requirement.

Tier II Capital primarily comprises of Provision on Standard Assets, Floating Provision and excess provision on sale of NPA which are created in accordance with the extant RBI guidelines.

**b. Details of Capital Funds**

(In Rs.'000)

Particulars	30 June 2016	31 Mar 2016
Capital - Head Office Account	44,971,087	44,971,087
Statutory Reserve	21,949,244	21,949,244
Capital Reserve	177,207	177,207
Remittable Surplus Retained for CRAR requirement	29,311,662	29,311,662
Less: Intangible assets	(32,396)	(32,396)
<b>CET1 Capital / Tier I Capital</b>	<b>96,376,804</b>	96,376,804
Investment Reserve	308,725	308,725
Provision on Standard Assets	3,483,526	3,483,526
Provision on Country Risk	58,674	58,674
Floating Provision	712,260	712,260
Provision made on Sale of NPA	427,500	427,500
Countercyclical provisioning buffer	150,000	150,000
<b>Tier II Capital</b>	<b>5,140,685</b>	5,140,685
<b>Total Capital</b>	<b>101,517,489</b>	101,517,489

**3. Capital adequacy**

**a. Approach to assessing capital adequacy for current and future activities**

The Bank is committed to maintaining its sound capitalisation. Therefore, overall capital demand and supply are constantly monitored and adjusted as necessary in line with the strategic, business and capital plans drawn up annually by the Bank. It should be noted that Deutsche Bank operates as an integrated Group through its business divisions and infrastructure functions. The local Asset and Liability Committee (ALCO) for the Bank is the primary platform for providing strategic direction and follow through action relating to the management of the entity's financial resources. Specifically, the ALCO ensures adequate capitalisation to meet current and future business and regulatory requirements and sets limits for capital usage by business.

Stress testing and sensitivity analysis are used to assess the Bank's ability to sustain operations during periods of stress. They provide an insight into the potential impact of significant adverse events on the Bank's earnings, risk profile and capital position.

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**b. Capital requirements for credit risk, market risk, operational risk, and Capital ratios per New Capital Adequacy framework**

The Bank is subject to the Basel III capital adequacy guidelines stipulated by RBI with effect from April 1, 2013. The guidelines provide a transition schedule for Basel III implementation till March 31, 2019.

Standalone capital ratio as per Basel III is 13.77%

(In Rs.'000)

Particulars	30 June 2016	31 March 2016
<b>Capital requirement for credit risk<sup>#</sup> -</b> (Standardised Approach)		
- Portfolios subject to Standardised Approach	<b>61,545,594</b>	58,183,389
- Portfolios subject to securitisation exposures	-	-
<b>Capital requirement for market risk<sup>#</sup></b> (Standardised Duration Approach)		
- Interest rate risk	<b>4,208,672</b>	5,042,243
- Foreign exchange risk (including gold)	<b>2,226,867</b>	2,116,898
- Equity risk	<b>108,169</b>	90,330
<b>Capital requirement for operational risk<sup>#</sup></b> (Basic Indicator approach)	<b>5,749,194</b>	5,749,194
<b>Total</b>	<b>6,569,252</b>	71,182,054
<b>Deutsche Bank AG, India Branches</b>		
<b>CET1 Capital / Tier I Capital adequacy ratio</b>	<b>13.07%</b>	13.03%
<b>Total Capital adequacy ratio</b>	<b>13.77%</b>	13.73%
<b>Consolidated Bank*</b>		
<b>CET1 Capital / Tier I Capital adequacy ratio</b>	<b>14.75%</b>	13.74%
<b>Total Capital adequacy ratio</b>	<b>15.44%</b>	14.42%

<sup>#</sup> Capital requirement is arrived at after multiplying the risk weighted assets by 10.125% (9.625% for 31 March 2016) (including minimum CCB requirements).

\* Based on unaudited accounts of DIHPL and DIPL

**4. Risk Exposure & Assessment**

**Risk Management Framework**

The wide variety of the Bank's businesses requires it to identify, measure, aggregate and manage its risks effectively, and to allocate capital among the businesses appropriately. The Bank operates as an integrated group through its divisions, business units and infrastructure functions. Risk and capital are managed via a framework of principles, organizational structures and measurement and monitoring processes that are closely aligned with the activities of the divisions and business units:

The Management Board (MB) provides overall risk and capital management supervision for its consolidated Group. The Risk Management Governance framework is designed to ensure clear accountability and coverage across the organisation for all material risk categories. Key features of DB Group's Risk governance model include:

- Core risk management responsibilities are embedded in the Management Board and appropriately delegated to senior risk management committees to ensure execution and oversight. The Supervisory Board regularly monitors the risk and capital profile.

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- DB Group operates a “three lines of defence” risk management model whereby front office functions own a strong first line of defence, risk management serves as second line of defence and the third line of defence is covered by Group Audit. In these three lines of defence model, oversight and assurance roles are therefore played by functions independent of one another.
- Risk management governance ensures full oversight of day-to-day risk management including appropriate monitoring and escalation of issues that could materially impact the risk profile of the Group and including potential issues that could result in the requirement to invoke recovery processes.
- Independent expert risk teams with clear accountability for the proactive management of each material risk inventory

#### Risk Management Organisation

The Supervisory Board exercises strategic control and supervision of DB Group. It monitors DB's risk and capital profile regularly via its designated subcommittee, the Risk Committee of the Supervisory Board. The chair of the Risk Committee reports on items discussed during the Risk Committee's meetings to the Supervisory Board.

The Risk Committee of the Supervisory Board meets regularly. At these meetings, the Management Board reports to the Risk Committee amongst others on credit, market, liquidity, refinancing, operational, strategic, cross-risk (including e.g. industry & country risk), regulatory as well as litigation, and reputational risks. It also reports on loans requiring a Supervisory Board resolution pursuant to law or the Articles of Association, questions of capital resources/leverage and matters of special importance due to the risks they entail. The Risk Committee deliberates with the Management Board on issues of the aggregate risk disposition and the risk strategy.

MB provides overall risk & capital management supervision for the consolidated Group and is exclusively responsible for day to day management of the company with the objective of creating sustainable value in the interest of its shareholders, employees and other stakeholders. The MB is responsible for defining and implementing comprehensive and aligned business and risk strategies, as well as ensuring well-defined risk management functions and operating processes are in place to ensure that DB's overall performance is aligned to its business and risk strategy.

The MB has delegated certain functions and responsibilities to relevant senior governance committees to support the fulfillment of these responsibilities. For risk-related topics, these are in particular the Capital and Risk Committee (CaR) and Risk Executive Committee (Risk ExCo).

The MB has mandated that:

- Risk ExCo, as the most senior functional committee of risk management of DB Group, identifies, controls and manages all risks including risk concentrations at Group level,. It is responsible for risk policy, the organisation and governance of risk management as well as ensuring the oversight of the execution of risk and capital management including identification, analysis and risk mitigation, within the scope of the risk and capital strategy (Risk & Capital Demand Plan) approved by the Management Board. The Risk ExCo is supported by subcommittees that are amongst others responsible for oversight on risk portfolios and policies, including the Portfolio Risk Steering Committee (PRSC) and the Group Reputational Risk Committee (GRRC).

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- CaR has responsibility for the alignment of risk appetite, capitalization requirements and funding needs of the Deutsche Bank Group with Group-wide, divisional and sub-divisional business strategies. It steers efficient capital consumption by determining capital availability in support of divisional business portfolios, capital earmarked for fresh investments, as well as other uses. Regular reviews of capital capacity and performance review of business initiatives drawing on Group capital are among its tasks. It provides a platform to discuss and agree strategic issues between risk management, Finance and the business divisions, which impact capital, funding or liquidity. The CaR ensures appropriate actions are defined and/or recommendations are made to the Management Board. It is also responsible for monitoring the performance of DB Group's risk profile against the DB Risk Appetite through the oversight of early warning indicators and ensuring escalation or actions are taken including the recommendation, where appropriate, to the MB to mobilize Recovery Management Governance which would result in the engagement of the Global Response Committee (GRC).

An overlap in membership between the CaR and the Risk ExCo facilitates a constant and comprehensive information flow between both committees.

The Portfolio Risk Steering Committee (PRSC) (to a certain extent the successor of the previous Cross Risk Review Committee (CRRC)) supports the CaR and the Risk ExCo with particular emphasis on the management of Group-wide risk portfolio. Amongst others PRSC, has responsibility for the oversight and control of DB Group's ICAAP ensuring compliance with respective regulatory requirements and policy setting. The PRSC also oversees the inventory of stress tests used for managing our risk appetite, reviews the results and proposes management action if required. It monitors the performance of the stress test process to ensure that it operates effectively and is in line with Group standards.

These committees may delegate some responsibilities to their sub-committees, working groups or designated functions.

#### **Role of the Chief Risk Officer (CRO)**

CRO is a member of the Management Board and has Group-wide supradivisional responsibility for the management of all credit, market, and operational risks, and liquidity risk for the control of risk and the continuing development of methods for the risk measurement. In addition, the CRO is responsible for monitoring, analyzing and reporting risk on a comprehensive basis, including asset and liability gap, capital, liquidity, legal, compliance and regulatory risks. The following risk management divisions report directly to the CRO:

- Credit Risk Management (CRM)
- Market Risk Management (MRM)
- Operational Risk Management (ORM)
- Liquidity Risk Control (LRC)
- Divisional CRO units (e.g. AWM and NCOU)
- Regional CROs units for the Americas, Asia Pacific and Germany, responsible for Risk oversight of the business and local portfolios within the region and serving as a key contact for Risk related matters with the regional regulators.

Risk Analytics & Living Wills reports to the Chief Credit Officer PBC / Chief Risk Officer Germany and Portfolio & Exposure Management reports to the Chief Credit Officer GM/ GTB.

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To ensure a wide coverage of risks by the members of the Management Board, the different risk management units ultimately report to different Management Board members. The following risk management functions report to other members of the Management Board:

- Compliance Risk
- Corporate Security & Business Continuity (CSBC)
- Government & Regulatory Affairs (G&RA)
- Legal (including Legal Risk Management (LRM))
- Treasury (including Liquidity Management but not Liquidity Risk Control which reports directly to the CRO).

Other functions of DB Group are also involved in risk management activities, including amongst others

- Group Audit
- Finance (including Group Tax, Group Reporting, Group Strategic Planning and Performance Management (GSPPM) and Group Capital Management)
- Group Strategy (AfK)
- Group Technology & Operations (GTO)

#### Recovery Management Governance

Recovery Management Governance has been embedded in DB's risk management framework to ensure that DB can proactively identify and respond to severe stress or the threat of a severe stress.

The integration of Recovery Management governance into the day-to-day risk management framework requires an effective ongoing oversight of DB's risk profile.

The key elements forming the basis of the Recovery Management governance in DB include:

- Clear roles and responsibilities in a normal operating environment and in a crisis under the Management Board oversight
- A dedicated set of early warning indicators and recovery triggers to identify potential risks, stimulate management action and a specific regular monitoring process
- An enhanced regime of severe stress tests and defined strategic recovery measures to enable proactive management of our risk profile
- A dedicated sub-committee of the CaR, the Living Wills Committee (LWC) to ensure ongoing monitoring and process readiness.

Key roles and accountabilities include:

- The Management Board owns the recovery plan and plays a key role in its maintenance and execution. This includes review and approval of the Group Recovery Plan on at least an annual basis, including the menu of recovery measures and the results of the scenario testing to prove the effectiveness of the plan. In times of crisis, the Management Board is responsible for invoking the Recovery Plan which mobilizes the Global Response Committee (GRC) in accordance with the status of the recovery triggers, the mobilization and cessation of recovery governance and decisions on the execution of the strategic recovery measures.

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- The Global Response Committee is a contingent committee formed in a crisis upon decision of the Management Board. It is responsible for the assessment and definition of the required recovery strategy and oversees the execution plan. The GRC will continue to evaluate and recommend appropriate actions to the Management Board until such time as the Management Board approves the return to the standard risk management governance by exiting the recovery process. The GRC task the Group Recovery Management Committee (GRMC) to manage the operational execution of the approved recovery strategy.
- The CaR is responsible for the oversight and monitoring of the performance of DB's risk profile (under both normal and stressed conditions) against defined qualitative and quantitative recovery triggers approved by the Management Board. In the case of a breach of the defined triggers or an assessment by the CaR of any other qualitative information that would, in its expert opinion, form the basis of a material risk to DB's risk profile, the CaR would escalate an initial assessment and recommendation of appropriate recovery measures to the Management Board.
- The Living Wills Committee, a sub-committee of the CaR, ensures standards and ongoing process readiness including the updating of tools and methodologies. The LWC also ensures that the Recovery Plan complies with regulatory requirements and is responsible for the continuous assessment of the appropriateness of key input factors in the Recovery Plan including, risk factors, scenarios, recovery measures and triggers. In addition the Living Wills team monitors DB's risk profile against its triggers through a dashboard which is reviewed on a weekly basis. It reports changes in early warning indicators and recovery triggers. The Living Wills team is tasked to escalate to the CaR any material degradation of the risk profile which could lead to a recovery situation

The Group's MB defines the Group's liquidity risk strategy, and in particular the Group's appetite for liquidity risk based on recommendations made by Treasury and/or Liquidity Risk Control (LRC) via the Group Risk Committee ("GRC"). At least once every year the Group's MB will review and approve the limits which are applied to the Group to measure and control liquidity risk as well as the Group's long-term funding and issuance plan.

The Bank's Treasury function is responsible for the management of the Bank's liquidity and funding risk globally as defined in the liquidity risk strategy. The Bank's liquidity risk management framework is designed to identify, measure and manage the Bank's liquidity risk position. Liquidity and Treasury Reporting and Analysis (LTRA) Team is responsible for the internal reporting on liquidity and funding across the firm on a global and local level. The Group's MB, in this context, is updated via a Liquidity Scorecard. In addition Liquidity Risk Control is responsible for the oversight and validation of the bank's liquidity risk framework. This includes the independent validation of all liquidity risk models as well as the review and back-testing of limits. The Bank's liquidity risk management approach starts at the intraday level forecasting cash flows and factoring in our access to Central Banks. It then covers tactical liquidity risk management dealing with access to secured and unsecured funding sources. Finally, the strategic perspective comprises the maturity profile of all assets and liabilities (Funding Matrix) and the Group's issuance strategy.

The Bank's cash-flow based reporting system provides daily liquidity risk information to global and local management. Stress testing and scenario analysis plays a central role in the Bank's liquidity risk management framework. This also incorporates an assessment of asset liquidity, i.e., the characteristics of the Bank's asset inventory, under various stress scenarios as well as contingent funding requirements from off-balance-sheet commitments. Daily stress test results are used to monitor the Group's ongoing compliance with the Board's overall liquidity risk appetite. Furthermore, the Group's short-term wholesale funding profile limits (both unsecured and secured) which are a key tool of the framework are calibrated against the stress test results on a monthly basis.

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**Specific Banking Risks**

The Group's risk management processes distinguish among four kinds of specific banking risks: credit risk, market risk, operational risk and liquidity risk.

- Credit risk arises from all transactions where actual, contingent or potential claims against any counterparty, borrower or obligor (which we refer to collectively as "counterparties") exist, including those claims that we plan to distribute (see below in the more detailed section Credit Risk). These transactions are typically part of traditional non-traded lending activities (such as loans and contingent liabilities), or our direct trading activity with clients (such as OTC derivatives, FX forwards and Forward Rate Agreements). The Bank distinguishes between three kinds of credit risk:

Default risk is the risk that counterparties fail to meet contractual payment obligations.

Country risk is the risk that DB may experience a loss, in any given country, due to a range of macroeconomic or social events primarily affecting counterparties in that jurisdiction including a possible deterioration of economic conditions, political and social upheaval, nationalization and expropriation of assets, government repudiation of indebtedness, or disruptive currency depreciation or devaluation. Country risk includes transfer risk which arises when debtors are unable to meet their obligations owing to an inability to transfer assets to non-residents due to direct sovereign intervention.

Settlement risk is the risk that the settlement or clearance of transactions will fail. It arises whenever the exchange of cash, securities and/or other assets is not simultaneous.

- Market risk arises from the uncertainty concerning changes in market prices and rates (including interest rates, equity prices, foreign exchange rates and commodity prices), the correlations among them and their levels of volatility.
- Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. It includes legal risk but excludes business and reputational risk.
- Liquidity risk is the risk arising from our potential inability to meet all payment obligations when they come due or only being able to meet these obligations at excessive costs.

Other risks such as Reputational Risk, Business Risk including Strategic Risk and Insurance Risk are also monitored by the Group.

**Risk Management Tools**

The Bank uses a comprehensive range of quantitative and qualitative methodologies for assessing and managing risks. As a matter of policy, the Group continually assesses the appropriateness and the reliability of its quantitative tools and metrics in light of the Group's changing risk environment. Some of these tools are common to a number of risk categories, while others are tailored to the particular features of specific risk categories.



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**4.1 Credit risk**

**a. Credit Risk Management Organisation and structure**

DB India has established a Risk Management Committee (RMC) by the Executive Committee (EXCO). The Risk Management Committee is mandated to oversee credit risk, market risk and operational risk related matters. The committee comprise of Head, CRM GM & GTB, Head MRM, Head CRM PWM, Head CRM PBC, Country Operational Risk Manager, Chief Operating Officer, Head, Compliance, Chief Financial Officer, ICAAP coordinator and Treasurer, India.

**b. CRM CIB / GM**

**(i) Credit Risk policies and procedures**

All business requests that involve credit risk need to be presented to CRM for its approval. Loan policy is updated annually and is also approved by the local Executive Committee. CRM uses its global ratings model for all risks and every counterpart is internally rated. CRM CIB / GM has a policy of annual reviews of all risk limits. This policy is strictly followed and any overdue reviews are regularly monitored and explained. The annual review is a comprehensive exercise which covers the Industry scenario, key business drivers, key risk factors, business and financial risk (including forex risk), management quality and transparency and a peer analysis along with downside scenarios in projections.

CRM CIB / GM in India has significant delegation of approval authority, to enable timely credit decisions, based on an understanding of local market conditions. In line with the global policy, CRM takes decisions in India on the 4 eyes principle.

In the event the credit authority of the local CRM team is not equipped to take a decision on complex / structured products, large ticket transactions, etc, the local CRM team forwards its recommendation on the request to senior CRM officers in APAC or globally, for the final decision, depending on the defined delegated authority.

CRM globally operates on the “Batch Strategy” concept, where each Industry / sector is reviewed globally in detail for risk drivers, along with an analysis of DB’s exposures in that sector globally – exposure amounts, counterparty ratings, products, risk profile, etc. This system enables DB to quantitatively focus on its global exposures in different Industries / sectors, as well as the credit ratings / facility ratings of the exposures within those sectors.

The Bank globally subjects all risk types covered under its Economic Capital (EC) concept and liquidity risk to regular stress tests. The Bank’s stress tests consider macroeconomic, business related and quantitative aspects to derive implications for its risk profile.

Risk limits and exposures on lower rated counterparties are intensively monitored. There is a quarterly CRM exercise to discuss all watch-list names. Deutsche Bank in India follows all the exposure norms and provisioning requirements as laid down by the RBI in its master circulars.

Within the CRM CIB / GM portfolio, concentration risk monitoring and mitigation plays an important role. CRM has guidelines in terms of maximum exposures on counterparties at different rating levels, with different levels of market access and in different categories of country risk.

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The Bank globally has a separate and independent Asset Quality Review function, which periodically reviews the quality of portfolios globally after intensive review and discussions with the local CRM teams. Based on these reviews, counterparty ratings may be adjusted and inconsistencies resolved, using local / global peer analysis as an effective tool. The timeliness of annual reviews as well as quality of the reviews are also looked into and corrective measures stipulated.

The credit risk assessment of exposures that are off-balance sheet are subject to the same vigorous scrutiny and approval process, as is followed for the balance sheet exposures. There is no differentiation between balance sheet and off-balance sheet exposures in the Bank's risk assessment and monitoring standards.

**(ii) Credit risk on trading instruments**

CRM CIB / GM has global systems in place to monitor the Mark to Market risk on all foreign currency and rates derivative transactions undertaken by the clients. DB uses the Potential Future Exposure at 95% confidence levels as the basis to determine the limit requirements for such products.

Internally, the Bank manages credit risk on all trading instruments by reference to three measures:

- Current Credit Exposure (“CCE”), which is the current value of any contract, at current market rates, as shown in the Bank's records. CCE will be reported net of enforceable collateral, and may be aggregated to reflect enforceable netting arrangements
- Potential Future Exposure (“PFE”), which is an estimate of the Current Credit Exposure that trading instruments could potentially assume in the future
- Stress Testing, which reflects the short term sensitivity of the portfolio CCE to market parameters.

To reduce derivatives-related credit risk, the Bank regularly seeks the execution of master agreements (such as the International Swap Dealers Association contract) with clients. A master agreement allows the offsetting of the obligations arising under all of the derivatives contracts that the agreement covers upon the counterparty's default, resulting in one single net claim against the counterparty (called “close-out netting”).

For credit exposure measurement purposes, as the replacement values of the portfolios fluctuate with movements in market rates and with changes in the transactions in the portfolios, the Bank also estimates the potential future replacement costs of the portfolios over their lifetimes. This is based on the Current Exposure method as per RBI master circular on Exposure norms.

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#### (iii) Credit rating policy

The Bank's rating system uses a granular, transparent 21 grade rating scale, which is in compliance with the Internal Ratings Based approach in Basel III. The credit ratings are the core element of the Bank's risk management framework and determine the –

- Level of authority required for approval
- The SEC classification (performing / non performing) and FED classification (Special Mention, Sub standard, Doubtful, Loss)

The accuracy and consistency of ratings are ensured through Front End Management, Portfolio Reviews including independent Asset Quality Reviews and validation by Risk Analytics and Instruments.

Each and every facility in the banking book is rated based on the internal rating model of DB. For each counterparty, the Credit Risk management assigns a Counterparty Probability of Default ('CPD') and for each facility, a Facility Probability of Default ('FPD') is assigned, along with the Loss Given Default ('LGD') and Country of Risk.

The Bank's ratings scale closely mirrors the scales used by key global rating agencies such as S & P and Moody's.

#### (iv) Definition and classification of past due and impaired (NPAs)

Loans and Advances are classified into performing and non-performing loans in accordance with the extant RBI guidelines.

Past due advances understood to mean Non Performing Advances are identified by periodic appraisals of the portfolio by the management and appropriate provisions are made which meets the prudential accounting norms prescribed by the RBI for asset classification, income recognition and provisioning after considering subsequent recoveries.

#### c. CRM PBC - Credit risk policies and procedures

CRM PBC India manages the credit risk of Retail Banking portfolio in India. All lending product launched within PBC are approved by CRM PBC before the launch. Credit Risk policies are clearly documented through Product Program for each product.

The scope of India Credit Policy covers the credit process for the PBC unit in India and details the following.

- Credit principles
- Generic credit process
- Credit authority guidelines
- Loan Loss Allowance / Write off guidelines

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The precise nature of the credit assessment, decision and monitoring process depends primarily on the type of product, exposure and the existence and quality of collateral.

The credit decision on a loan request involves rule based risk assessment which takes into account the following:

- Customer information given in the application form (general customer data / financial information)
- Information on the borrower’s behaviour (external data/account movements, where available)
- Specific information of the application itself (credit volume / collateral)

When deciding on a loan request, all required information and documents are considered. The credit officer assesses the profile of the applicant and ability to repay the loan based on various reports available, viz. verification, bureau and policy results etc. as part of the loan file. The portfolio is reviewed at periodic intervals and analysis is made to understand the behaviour of the portfolio in terms of repayment, delinquency, transactions etc.

**d. CRM WM**

CRM WM adopts similar credit risk and rating policies as CRM GM.

**e. Total Gross Credit exposures**

Category	(In Rs.'000)	
	30 June 2016	31 March 2016
Bills purchased and discounted	<b>112,701,971</b>	115,090,371
Cash credits, overdrafts and loans repayable on demand	<b>228,828,698</b>	225,566,560
Term loans	<b>98,380,909</b>	92,770,112
Inter Bank	<b>26,928,063</b>	40,187,604
Bonds	<b>874,327</b>	874,327
<b>Total Fund-based Exposures</b>	<b>467,713,968</b>	474,488,974
Guarantees given on behalf of customers	<b>143,262,018</b>	153,275,603
Acceptances, endorsements and other obligations	<b>82,486,379</b>	75,086,009
Derivative exposures	<b>173,469,112</b>	168,983,499
Undrawn Commitment and others	<b>63,983,592</b>	65,102,545
<b>Total Non-fund based Exposures</b>	<b>463,201,101</b>	462,447,656

Exposure for the purposes of tables in this section reflect actual notional, except for derivative exposures which is based on the current exposure method prescribed by RBI vide its master circular on Exposure norms.

The Bank renders its services within one geographical segment and has no offices outside India.

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**f. Industry Type distribution of exposures (period ended 30 June 2016)**

(In Rs.'000)

Sector ID	Sector Name	Funded	Non Funded	Total	Percentage of Total
1	Mining & Quarrying	399,163	100,000	499,163	0.05%
2	Food Processing	5,079,834	2,278,343	7,358,177	0.79%
3	Beverages	6,291,942	1,259,654	7,551,596	0.81%
4	Textile	3,136,884	79,143	3,216,027	0.35%
5	Leather & Leather Products	414,303	32,228	446,531	0.05%
6	Wood and Wood products	334,596	93,964	428,560	0.05%
7	Paper and paper Products	2,095,442	-	2,095,442	0.23%
8	Petroleum, Coal Products and Nuclear Fuels	12,394,474	8,934,048	21,328,522	2.29%
9	Chemical and chemical products	26,245,095	10,393,344	36,638,439	3.94%
10	Rubber Plastic and their products	3,277,644	678,036	3,955,680	0.42%
11	Glass & Glassware	309,455	224,480	533,935	0.06%
12	Cement and Cement Products	2,033,900	86,151	2,120,051	0.23%
13	Basic Metal and Metal Products	34,003,444	8,433,726	42,437,170	4.56%
14	All Engineering	34,105,249	55,277,739	89,382,988	9.60%
15	Vehicles, Vehicle Parts and Transport Equipments	15,121,766	20,751,034	35,872,800	3.85%
16	Gems and Jewellery	267,493	12,747	280,240	0.03%
17	Construction	291,456	96,740	388,196	0.04%
18	Infrastructure	29,370,927	34,078,839	63,449,766	6.82%
19	Other Industries	128,518,177	235,921,138	364,439,315	39.14%
20	Residuary Other Advances	164,022,724	84,469,747	248,492,471	26.69%
<b>Total</b>		<b>467,713,968</b>	<b>463,201,101</b>	<b>930,915,069</b>	<b>100.00%</b>

**Industry Type distribution of exposures (financial year ended 31 March 2016)**

(In Rs.'000)

Sector ID	Sector Name	Funded	Non Funded	Total	Percentage of Total
1	Mining & Quarrying	488,058	1,045,012	1,533,070	0.16%
2	Food Processing	5,298,121	13,275,241	18,573,362	1.98%
3	Beverages	8,616,724	167,296	8,784,020	0.94%
4	Textile	3,992,154	21,556	4,013,710	0.43%
5	Leather & Leather Products	435,090	162,751	597,841	0.06%
6	Wood and Wood products	320,627	5,744	326,371	0.03%
7	Paper and paper Products	2,257,273	5,000	2,262,273	0.24%
8	Petroleum, Coal Products and Nuclear Fuels	10,477,111	7,811,164	18,288,275	1.95%
9	Chemical and chemical products	31,405,215	12,163,185	43,568,400	4.65%
10	Rubber Plastic and their products	3,278,538	884,598	4,163,136	0.44%
11	Glass & Glassware	293,335	274,674	568,009	0.06%
12	Cement and Cement Products	1,886,603	1,110,813	2,997,416	0.32%
13	Basic Metal and Metal Products	31,218,991	13,176,574	44,395,565	4.74%
14	All Engineering	32,804,169	44,491,837	77,296,006	8.25%
15	Vehicles, Vehicle Parts and Transport Equipments	14,570,603	23,157,787	37,728,390	4.03%
16	Gems and Jewellery	164,743	58,265	223,008	0.02%
17	Construction	401,824	1,995,552	2,397,376	0.26%
18	Infrastructure	21,689,483	34,344,122	56,033,605	5.98%
19	Other Industries	146,321,877	221,748,045	368,069,922	39.28%
20	Residuary Other Advances	158,568,435	86,548,440	245,116,875	26.18%
<b>Total</b>		<b>474,488,974</b>	<b>462,447,656</b>	<b>936,936,630</b>	<b>100.00%</b>

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**g. Residual contractual maturity breaks down of Total Assets –**

Maturity buckets	(In Rs'000)	
	30 June 2016	31 March 2016
Day 1	128,774,838	98,670,587
2 to 7 days	31,965,325	69,109,939
8 to 15 days	24,395,185	13,151,045
15 to 30 days	56,390,502	42,588,127
31 days to 3 months	99,787,866	85,077,819
Over 3 months to 6 months	67,799,199	85,632,820
Over 6 months to 12 months	62,253,967	70,821,562
Over 1 Year to 3 Years	123,262,079	123,488,447
Over 3 Years to 5 Years	20,614,216	17,746,702
Over 5 Years	97,396,106	87,425,600
<b>Total</b>	<b>712,639,283</b>	<b>693,712,648</b>

**h. Amount of Non Performing Assets -**

NPA Classification	(In Rs'000)	
	30 June 2016	30 June 2016
	Gross NPAs	Net NPAs
Substandard	1,541,204	1,286,131
Doubtful		
- Doubtful 1	394,027	283,837
- Doubtful 2	319,883	46,100
- Doubtful 3	3,973	-
Loss	373,988	-
Total	2,633,075	1,616,068
NPA Ratio	0.60%	0.37%

NPA Classification	(In Rs'000)	
	31 March 2016	31 March 2016
	Gross NPAs	Net NPAs
Substandard	1,085,357	908,155
Doubtful		
- Doubtful 1	233,218	166,033
- Doubtful 2	294,581	30,535
- Doubtful 3	4,100	-
Loss	373,988	-
Total	1,991,244	1,104,723
NPA Ratio	0.46%	0.26%

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**i. Movement in NPAs**

<b>(In Rs'000)</b>		
	<b>30 June 2016</b>	31 March 2016
<b>Movement in NPAs (funded)</b>		
<b>(i)</b> Net NPAs to Net Advance (%)	<b>0.37%</b>	0.26%
<b>(ii) Movement of Gross NPAs</b>		
a) Opening balance	<b>1,991,244</b>	1,192,981
b) Additions during the year	<b>731,086</b>	1,386,191
c) Reductions during the year	<b>(89,255)</b>	(587,928)
d) Closing Balance	<b>2,633,075</b>	1,991,244
<b>(iii) Movement of Net NPAs</b>		
a) Opening balance	<b>1,104,723</b>	465,815
b) Additions during the year	<b>576,885</b>	1,121,789
c) Reductions during the year	<b>(65,540)</b>	(482,881)
d) Closing Balance	<b>1,616,068</b>	1,104,723
<b>(iv) Movement of Provisions for NPAs (excluding provisions on standard assets)</b>		
a) Opening balance	<b>886,521</b>	727,166
b) Provisions made during the year	<b>154,201</b>	264,402
c) Write off/write back of excess provisions during the year	<b>(23,715)</b>	(105,047)
d) Closing Balance	<b>1,017,007</b>	886,521

**j. Amount of NPIs**

<b>(In Rs'000)</b>		
<b>Particulars</b>	<b>30 June 2016</b>	31 March 2016
Closing balance for the period	<b>3,000</b>	3,000
Total provisions held	<b>3,000</b>	3,000
<b>Net book Value</b>	-	-

**k. Movement in Provision for Depreciation on Investments**

<b>(In Rs'000)</b>		
<b>Provisions for depreciation on investments</b>	<b>30 June 2016</b>	31 March 2016
Opening balance	<b>381,389</b>	368,940
Add: Provisions made during the period / year	-	12,449
Less: Write-off/write back of excess provisions during the period	<b>3,500</b>	-
<b>Closing balance</b>	<b>377,889</b>	381,389

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**4.2 Credit risk – Portfolios subject to Local Standardised Approach**

**a. Credit rating agencies**

The Bank uses short-term and long-term instrument/bank facilities' ratings from CARE, CRISIL, ICRA and India Ratings and Research Private Limited (Fitch) to assign risk weights in terms of RBI guidelines. In respect of claims on non-resident corporate and foreign banks, ratings assigned by international rating agencies i.e. Standard & Poor's, Moody's and Fitch are used. The Bank uses credit ratings that are publicly available for assigning risk weights.

The Bank assigns Long term credit ratings accorded by the chosen credit rating agencies for assets which have a contractual maturity of more than one year. However, in accordance with the guidelines of RBI the bank classifies all cash credit exposures as long term exposures and accordingly the long term ratings accorded by the chosen credit rating agencies are assigned.

The Bank uses issuer and issue ratings for both fund as well as non fund based exposures. The Bank has used the solicited ratings assigned by the above approved credit rating agencies for all eligible exposures, both on balance sheet and off balance sheet, whether short term or long term, in the manner permitted in the RBI guidelines. The Bank does not have an assigned ratings agency for a given type of claim.

**b. Outstanding amounts**

Bucket wise break up of exposure amounts subject to the standardised approach is as under

Exposure Category	(In Rs'000)	
	30 June 2016	31 March 2016
Under 100% risk weight	<b>160,847,211</b>	187,314,667
100% risk weight	<b>295,831,676</b>	276,421,999
Above 100% risk weight	<b>11,035,081</b>	10,752,308
<b>Total Fund-based Exposures</b>	<b>467,713,968</b>	474,488,974
Under 100% risk weight	<b>270,251,106</b>	264,186,528
100% risk weight	<b>179,935,519</b>	176,693,256
Above 100% risk weight	<b>13,014,476</b>	21,567,872
<b>Total Non Fund-based Exposures</b>	<b>463,201,101</b>	462,447,656



**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**4.3 Credit risk mitigation policy**

**a. Collateral valuation and management**

As stipulated by the RBI guidelines, the Bank uses the Comprehensive Approach for collateral valuation. Under this approach, the Bank reduces its credit exposure to counterparty when calculating its capital requirements to the extent of risk mitigation provided by the eligible financial collateral.

**b. Types of collaterals taken by the Bank and main types of guarantor counterparties and Credit risk concentration within mitigation taken**

Collateral Risk Management is undertaken through the mechanism of the Facility Probability of Default (FPD) assignment.

If there is no liquid collateral and no guarantor mitigating the credit risk, then the FPD will be the same as the Counterparty Probability of Default (CPD).

If the facility risk can be shifted to the guarantor, the guarantor CPD becomes the FPD. In cases of received guarantees from un-correlated third parties, covering a Separate primary DB exposure, where for the Bank to incur a loss there needs to be a default by both the primary obligor as well as the guarantor, the Joint Default Probability ('JDP') applies. The Bank has in place a matrix indicating this JDP for the entire scale of primary obligor and guarantor CPDs.

The Bank accepts security in the form of charge on receivables / inventories for working capital facilities, charge on fixed assets in certain cases, besides guarantees for various obligations by the primary obligor and property collateral for mortgage loans to retail banking clients. The guarantees could be received from the local holding company of the obligor, or a stronger company within the same group or from the MNC parent of the local subsidiary. In certain cases, facilities to obligors may be supported by partial / full insurance protection purchased. Hence, since there are varied sources of credit protection acquired through different guarantors, there is no concentration of guarantor risk.

The Bank records the Joint Obligor Risk Limit on the various guarantors, which ensures that the amounts of guarantees received from various sources are monitored for risk management purposes, e.g. the amount of insurance protection acquired from different insurance companies. The facility ratings for Joint Obligor Risk Limits are determined in accordance with the matrix in the Credit Ratings Policy of the Bank. This matrix captures the counterparty Probability of Default of the obligor as well as that of the guarantor, in determining the JPD.

**c. Exposure covered by eligible financial collateral:**

Exposures covered by financial collateral	(In Rs'000)	
	30 June 2016	31 March 2016
Exposures before Credit Risk Mitigation Technique	<b>54,144,568</b>	44,646,099
Exposures after Credit Risk Mitigation Technique (after application of haircut on collateral)	<b>11,143,875</b>	9,740,807

**d. Securitisation Exposure**

The Bank did not have any securitisation transactions outstanding as the end of the previous year nor were any new securitization transactions entered into current financial year and hence no disclosures are being made.

### Management disclosures under Pillar 3 – Period ended June 30, 2016

#### 4.4 Market risk in trading book

##### a. Market risk management framework

The Bank uses a combination of risk sensitivities, Value-at-Risk and stress testing metrics to manage market risks and establish limits. Value-at-Risk is a common metric used in the management of trading market risks.

The MB and Group Risk Committee, supported by Group Market Risk Management, which is part of the independent risk management function, set a Group-wide Value-at-Risk limit for the market risks in the trading book. Group Market Risk Management sub-allocates this overall limit to the Group Divisions. Below that, limits are allocated to specific business lines and trading portfolio groups and geographical regions. In addition to the Bank's main market risk Value-at-Risk limits, also stress testing and sensitivity limits are also operated.

The Bank's Value-at-Risk for the trading businesses is based on internal model. In October 1998, the German Banking Supervisory Authority (now the BaFin) approved the internal Value-at-Risk model for calculating market risk capital for the Group for both general and specific market risks. Since then the model has been periodically refined and approval has been maintained.

##### b. Types of market risk

Substantially all of the Bank's businesses are subject to the risk that market prices and rates will move and result in profits or losses. The Bank distinguishes among four types of market risk:

- Interest rate risk including credit spread
- Equity price risk (where applicable)
- Foreign exchange risk
- Commodity price risk (where applicable)

The interest rate and equity price risks consist of two components each. The general risk describes value changes due to general market movements, while the specific risk has issuer-related causes.

##### c. Risk Management Tools

The following are the most important quantitative tools and metrics currently used to measure, manage and report market risk:

- Value-at-Risk. The Bank uses the Value-at-Risk approach to derive quantitative measures for trading book market risks under normal market conditions. The Value-at-Risk figures play a role in both internal and external (regulatory) reporting. For a given portfolio, Value-at-Risk measures the potential future loss (in terms of market value) that, under normal market conditions, will not be exceeded with a defined confidence level in a defined period. The Value-at-Risk for a total portfolio represents a measure of diversified market risk (aggregated using pre-determined correlations) in that portfolio.
- Stress Testing. While Value-at-Risk, calculated on a daily basis, supplies forecasts for potential large losses under normal market conditions, it is not adequate to measure the tail risks of the portfolios. The Bank therefore also performs regular stress tests in which it values the trading portfolios under severe market scenarios not covered by the confidence interval of the Value-at-Risk model.

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**d. Value-at-Risk Analysis**

The Value-at-Risk approach derives a quantitative measure for the trading book market risks under normal market conditions, estimating the potential future loss (in terms of market value) that will not be exceeded in a defined period of time and with a defined confidence level. The Value-at-Risk measure enables to apply a constant and uniform measure across all of the trading businesses and products. It also facilitates comparisons of market risk estimates both over time and against the daily trading results.

The Bank calculates Value-at-Risk using a 99% confidence level and a holding period of one day.

The Bank's Value-at-Risk model is designed to take into account the following risk factors- interest rates, equity prices, foreign exchange rates and commodity prices, as well as their implied volatilities. The model incorporates both linear and, especially for derivatives, nonlinear effects of the risk factors on the portfolio value. The statistical parameters required for the Value-at-Risk calculation are based on a 261 trading day history (corresponding to at least one calendar year of trading days) with equal weighting being given to each observation. The Bank calculates Value-at-Risk using the Monte Carlo simulation technique and assuming that changes in risk factors follow a normal or logarithmic normal distribution.

To determine the aggregated Value-at-Risk, the Bank uses historically observed correlations between different general market risk classes. However, when aggregating general and specific market risks, it is assumed that there is zero correlation between them. The Value-at-Risk analysis should also be viewed in the context of the limitations of the methodology the Bank uses and are therefore not maximum amounts that can be lost on the market risk positions. The limitations of the Value-at-Risk methodology include the following:

- The use of historical data as a proxy for estimating future events may not capture all potential events, particularly those that are extreme in nature.
- The assumption that changes in risk factors follow a normal or logarithmic normal distribution. This may not be the case in reality and may lead to an underestimation of the probability of extreme market movements.
- The correlation assumptions used may not hold true, particularly during market events that are extreme in nature.
- The use of a holding period of one day assumes that all positions can be liquidated or hedged in that period of time. This assumption does not fully capture the market risk arising during periods of illiquidity, when liquidation or hedging in that period of time may not be possible.
- The use of a 99 % confidence level does not take account of, nor makes any statement about, any losses that might occur beyond this level of confidence.
- The Bank calculates Value-at-Risk at the close of business on each trading day. The Bank does not subject intraday exposures to intraday Value-at-Risk calculations.
- Value-at-Risk does not capture all of the complex effects of the risk factors on the value of positions and portfolios and could, therefore, underestimate potential losses.

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

The Group acknowledges the limitations in the Value-at-Risk methodology by supplementing the Value-at-Risk limits with other position and sensitivity limit structures, as well as with stress testing, both on individual portfolios and on a consolidated basis.

The calculated Value-at-Risk numbers for India are used for internal control purposes only, the calculation of regulatory capital being based on the Standardised Approach specified by the RBI. At the Group level, however, Value-at-Risk numbers are used for both internal control and Regulatory Capital calculation for market risk.

**e. Back-Testing**

The Bank uses back-testing in the trading units to verify the predictive power of the Value-at-Risk calculations. In back-testing, the hypothetical daily profits and losses are compared under the buy-and-hold assumption with the estimates from the Value-at-Risk model. The Bank analyzes performance fluctuations and assesses the predictive power of the Value-at-Risk model, which in turn allows improvement of the risk estimation process.

**f. Hedging**

The Bank manages its risk from derivatives activity on a portfolio basis. Specific hedges undertaken, if any are ring fenced from the transactions undertaken for trading/market making purposes and held in separate designated portfolio for easy identification and control.

**g. Capital requirements for market risk**

Particulars	(In Rs'000)	
	30 June 2016	31 March 2016
Capital requirement for market risk		
- Interest rate risk	4,208,672	5,042,243
- Foreign exchange risk (including gold)	2,226,867	2,116,898
- Equity risk	108,169	90,330
<b>Total</b>	<b>6,543,708</b>	<b>7,249,471</b>

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**4.5 Operational risk**

**a. Operational risk management framework**

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. It includes legal risk but excludes business and reputational risk.

In 2015, Deutsche Bank further enhanced its capabilities in Operational Risk Management (“ORM”), in conjunction with the Three Lines of Defence (“3LoD”) Program. This included the increased clarification of the roles and responsibilities of the first and second line in managing operational risk, strengthening governance and delivery of improved tools to support risk identification and assessment. As of 2016 the responsibility for the 3LoD program resides at Group ORM.

Group Operational Risk Management (Group ORM) has responsibility for the design, implementation and maintenance of the Operational Risk Management Framework (ORMF) including the associated governance structures. Group ORM also has the responsibility for providing a cross-risk assessment and aggregation of risks to provide a holistic portfolio view of the non-financial risk profile of the Bank, which includes oversight of risk and control mitigation plans to return risk within risk tolerance, where required. We take decisions to manage operational risks, both strategically as well as in day-to-day business. Four principles form the foundation of operational risk management at Deutsche Bank.

- Operational Risk Principle I: Risk Owners have full accountability for their operational risks and have to manage against a defined risk specific appetite. Risk owners are defined to be: First LoD (GM, GTB, AWM, PBC, NCOU and first LoD Infrastructure Functions GTO, CS), for all of their operational risks and second LoD (Infrastructure Functions), for the operational risks that arise in their control processes.
- Risk Principle II: Risk Type Controllers (Second LoD control functions) establish the risk management framework and define specific Risk Appetite statements for the Risk Type they own and perform independent controls. Risk Type Controllers are independent second LoD control functions which control specific risk types as identified in the risk taxonomy. We are working towards full implementation of these responsibilities.
- Operational Risk Principle III: Group Operational Risk Management establishes and maintains the Group Operational Risk Management Framework. Group ORM develops and maintains the Group's framework, defining the roles and responsibilities for the management of operational risk across the bank and for defining the process to identify, assess, mitigate, monitor, report and escalate operational risks. Group ORM also maintains an operational risk taxonomy and oversees the completeness of coverage of risk types identified in the taxonomy by 2nd Line Control Functions. It also monitors execution and results of Deutsche Bank Group's Risk and Control Assessment process and operational risk concentrations.

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

- Operational Risk Principle IV: Group Operational Risk Management aims to maintain sufficient capital to underpin Operational Risk. Group ORM is accountable for the design, implementation and maintenance of an appropriate approach to determine a sufficient level of capital demand for Operational Risk for recommendation to the Management Board. To fulfil this requirement Group ORM is accountable for the calculation and allocation of Operational Risk Capital demand and Expected Loss planning under the Advanced Measurement Approach (“AMA”) approach. Group ORM is also accountable for the execution of data input controls for the Operational Risk capital calculation and for the facilitation of the annual OR Capital budgeting and monthly review process.

Organisational and Governance structure:

- Group Operational Risk Management is part of the Group Risk function which is headed by the Chief Risk Officer (“CRO”). The CRO appoints the Head of Group Operational Risk Management.
- Within Group ORM the Head of Group Operational Risk Management is accountable for the design, implementation and maintenance of an effective and efficient Group Operational Risk Management Framework.
- The NFR ExCo, which is chaired by the Chief Risk Officer, is responsible for the oversight, governance and coordination of the Non-Financial Risk management in the Deutsche Bank Group on behalf of the Management Board by establishing a cross-risk and holistic perspective of the key Non-Financial Risks of the Group. The decision-making and policy related authorities include the review, advice and management in a diligent manner of all Non-Financial Risk issues which may impact the holistic / cross risk profile reported by a business division or infrastructure function.
- The Regulatory Capital Committee (“RCC”) has delegated parts of its authority for operational risk capital demand management to the AMA Committee (“AMAC”) within defined limits. The AMAC is mandated to oversee the regulatory and economic capital process for operational risk. It aims to ensure adherence to regulatory requirements for the AMA model and its calculation process as well as their adherence to internal policies. The committee either directly approves, or endorses to the RCC for approval, all quantitative and qualitative changes impacting Deutsche Bank's regulatory or economic capital. Additionally, the committee oversees all relevant aspects of model risk for operational risk models. While the day-to-day management of operational risk is the primary responsibility of our business divisions and infrastructure functions, Group ORM manages the cross divisional and cross regional operational risk as well as risk concentrations and promotes a consistent application of the ORMF across the bank. Through our business partnership model, we aim to maintain close monitoring and high awareness of operational risks.

**b. Risk management tools**

We manage operational risk using the Group Operational Risk Management framework which enables us to determine our operational risk profile in comparison to our risk tolerance, to systematically identify operational risk themes and concentrations, and to define risk mitigating measures and priorities. In order to cover the broad range of risk types underlying operational risk, our framework contains a number of operational risk management techniques/ tools. These aim to efficiently manage the operational risk in our business and are used to identify, assess and mitigate operational risks:

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

- The continuous collection of operational risk loss events is a prerequisite for operational risk management including detailed analyses, definition of mitigating actions and timely information to senior management. All losses above € 10,000 are captured and tracked through the “db-Incident Reporting System” (“dbIRS”).
- The lessons learned process is required for events, including near misses, above € 500 thousand. This process includes but is not limited to:
  - systematic risk analyses including a description of the business environment in which the loss occurred, including previous events, near misses and event specific Key Risk Indicators (“KRI”)
  - root cause analyses
  - review of control improvements and other actions to prevent and/or mitigate recurrence
  - assessment of the residual operational risk exposure.

The execution of corrective actions identified in this process are systematically tracked and reported monthly to senior management.

**Scenario Analyses:** We complete our risk profile using a set of scenarios including relevant external cases provided by a public database and additional internal scenarios. We thereby systematically utilize information on external loss events occurring in the banking industry to prevent similar incidents from happening to us, for example through particular deep dive analyses or risk profile reviews.

**Emerging Risk Identification:** We assess and approve the impact of changes on our risk profile as a result of new products, outsourcing activities, strategic initiatives, acquisitions and divestments as well as material systems and process changes. Once operational risks are identified and assessed, they are compared to the relevant specific risk appetite statement and either mitigated or accepted. Risks which violate applicable national or international regulations and legislation cannot be accepted; once identified, such risks must always be mitigated.

**Read-across Analysis:** We continuously seek to enhance the process to assess whether identified issues require a broader approach across multiple entities and locations within Deutsche Bank. A review of material findings is performed in order to assess their relevance to areas of the Bank other than where they originated. We are developing business intelligence software to identify risk clusters across the bank accessing various sources of information. We aim to increase our predictive analysis and clustering capabilities and to identify risk concentrations in a timely manner through the use of this tool.

**Risk Mitigation:** When we implement risk mitigating measures, we systematically monitor their resolution. Residual operational risks rated significant or above need to be accepted by the risk bearing division and reviewed for decision by the Head of Group ORM.

We perform Top Risk Analyses in which the results of the aforementioned activities are covered. The Top Risk Analyses are a primary input for the annual operational risk management strategy and planning process and aim to identify our most critical risks in terms of probability and severity.

## Deutsche Bank AG - India Branches

(Incorporated in Germany with limited liability)

### Management disclosures under Pillar 3 – Period ended June 30, 2016

Key Risk Indicators are used to monitor the operational risk profile and alert the organization to impending problems in a timely fashion. KRIs enables the monitoring of the bank's control culture and business environment and trigger risk mitigating actions. They facilitate the forward looking management of operational risks, based on early warning signals.

In our bottom-up Self-Assessment ("SA") process, which is conducted at least annually, areas with high risk potential are highlighted, and risk mitigating measures to resolve issues are identified. On a regular basis we conduct risk workshops aiming to evaluate risks specific to local legal entities and the countries we operate in, and take appropriate risk mitigating actions. We are in the course of replacing this existing SA process by an enhanced Risk and

Control Assessment process, supported by a group wide IT tool. We plan to substantially cover the Bank's nonfinancial operating units under this enhanced approach in 2016.

Additional methodologies and tools implemented by the responsible second line Risk Type Controllers are utilized to complement the global operational risk framework and specifically address the individual risk types. These include but are not limited to:

Legal Risk is a significant risk factor for DB, which as described in detail in the "Provisions" note of our Consolidated Financial Statements. A Legal Risk Management ("LRM") function within our Legal Department is exclusively dedicated to the identification and management of legal risk. It undertakes a broad variety of tasks aimed at proactively managing legal risk, including: devising, implementing and overseeing an annual Legal Risk Assessment Program analyzing existing and historic legal risks; agreeing and participating in resulting portfolio reviews and mitigation plans; and administering the Legal Lessons Learned process.

The operational risk from outsourcing is managed by the Vendor Risk Management (VRM) Process and documented in the VRM database. The outsourcing risk is assessed and managed for all outsourcing arrangements individually, following the Vendor Risk Management Policy and in line with the overall ORM framework. A broad governance structure is established to promote appropriate risk levels.

Fraud Risk is managed based on section 25a of the German Banking Act (KWG) as well as other legal and regulatory requirements via a risk based approach, governed by the Global Anti-Fraud Policy and corresponding Compliance and Anti-Money-Laundering (AML) framework. In line with regulatory requirements, a global risk assessment is performed on a regular basis. Within the general management of operational risks, dedicated Fraud Risk relevant aspects are part of the self assessment process.

We manage Business Continuity Risk with its Business Continuity Management ("BCM") Program which outlines core procedures for the relocation or the recovery of operations in response to varying levels of disruption. Within this program, each of our core businesses functions and infrastructure groups set up, maintain and periodically test business continuity plans to promote continuous and reliable service. The BCM Program has defined roles and responsibilities which are documented in corporate standards. Compliance with these standards is monitored regionally by dedicated business continuity teams. Furthermore, key information on the established BCM control environment feed into operational risk KRIs.



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The Operational Risk in Technology is managed within the Group Technology Organization, following international standards for IT management. Applications and IT infrastructure are catalogued and assessed on a regular basis. Stability monitoring is established. Key outcomes of the established assessment and control environment are used as input for KRIs or self-assessments.

#### c. Measuring Operational Risks

We calculate and measure the regulatory and economic capital requirements for operational risk the Advanced Measurement Approach (AMA) methodology. Our AMA capital calculation is based upon the loss distribution approach (“LDA”). Gross losses from historical internal and external loss data (Operational Risk data eXchange Association (ORX) consortium data) and external scenarios from a public database (IBM OpData) complemented by internal scenario data are used to estimate the risk profile (i.e., a loss frequency and a loss severity distribution). Our LDA model includes conservatism by recognizing losses on events that arise over multiple years as single events in our historical loss profile.

Moreover, we have submitted an additional model change request to our Germany supervisory authority BaFin to replace the € 1 billion regulatory capital safety margin, which we have continuously applied since its implementation in 2011. This change will make our model more risk sensitive by including reasonably possible litigation losses in our “Relevant Loss Data” set. Reasonably possible litigation losses may result from ongoing and new legal matters which are reviewed quarterly and are based on the judgment provided by our Legal Department. While our dialogue with the joint supervisory team on these model enhancements is ongoing, management had decided recognize the impact of material model changes in the second quarter 2014 wherever they will lead an increase in the capital requirement over the models that have previously been approved by BaFin.

Within LDA Model, the frequency and severity distributions are combined in a Monte Carlo simulation to generate potential losses over a one year time horizon. Finally, the risk mitigating benefits of insurance are applied to each loss generated in the Monte Carlo simulation. Correlation and diversification benefits are applied to the net losses in a manner compatible with regulatory requirements to arrive at a net loss distribution at Group level, covering expected and unexpected losses. Capital is then allocated to each of the business divisions and both, a qualitative adjustment and an expected loss deduction, are performed.

The regulatory capital requirement for operational risk is derived from the 99.9 % percentile. The economic capital is set at a level to absorb at a 99.98 % percentile very severe aggregate unexpected losses within one year. Both regulatory and economic capital requirements are calculated for a time horizon of one year.

The Regulatory and Economic Capital demand calculations are performed on a quarterly basis. Group ORM aims to ensure that for the approach for capital demand quantification appropriate development, validation and change governance processes are in place, whereby the validation is performed by an independent validation function and in line with Deutsche Bank’s model risk management process.

In India, the group uses the Basic Indicator Approach for computing capital requirements for operational risk as per requirements of local regulatory guidelines.

**Management disclosures under Pillar 3 – Period ended June 30, 2016**

**5. Interest rate risk in the banking book**

The vast majority of the interest rate risk and foreign exchange risk arising from the non-trading assets and liability positions in the Banking book are transferred through internal hedges to the Global Markets business line division and is managed on the basis of Value-at-Risk as reflected in the trading Value-at-Risk numbers. The treatment of interest rate risk in the Group's trading portfolios and the application of the Value-at-Risk model is discussed above. The bank considers this risk to be a part of the overall market risk framework.

**6. Counterparty Credit Risk**

**Credit Limits and Collaterals**

Counterparty credit risk (CCR) is the risk that a Bank's counterparty defaults in a FX, interest rate, commodity or credit derivative contract prior to or at the maturity date of the contract and that the Bank at the time has a claim on the counterparty.

The credit risk arising from all financial derivatives is managed as part of the overall credit limits to both financial institutions and other clients and customers.

Exposure values for regulatory capital purposes on over the counter traded products are calculated according to the Current Exposure Method as defined by RBI. This is calculated as the sum of the current replacement cost and the PFE. The current replacement cost is the amount owed by the counterparty to the Bank for various financial derivative transactions. The PFE is an add-on based on a percentage of the notional principal of each transaction. These percentages are prescribed by the RBI in the guidelines and vary according to the underlying asset class and tenor of each trade.

The Bank seeks to negotiate Credit Support Annexes (CSA) to International Swaps and Derivatives Association master agreements with counterparties on a case-by-case basis, where collateral is deemed a necessary or desirable mitigant to the exposure. The credit terms of the CSA are specific to each legal document and determined by the credit risk approval unit responsible for the counterparty. The nature of the collateral will be specified in the legal document and will typically be cash or highly liquid securities. A daily operational process takes place to calculate the MTM on all trades captured under the CSA. Additional collateral will be called from the counterparty if total uncollateralised MTM exposure exceeds the threshold and minimum transfer amount specified in the CSA. Additional collateral may be required from the counterparty to provide an extra buffer to the daily variation margin process. The Bank further reduces its credit exposures to counterparties by entering into contractual netting agreements which result in a single amount owed by or to the counterparty through netting the sum of the positive (amounts owed by the counterparty) and negative (amounts owed by the Bank) MTM values of these transactions.

In India, the Bank follows SA for credit risk and hence no credit reserve is set aside. However, provisioning for the exposures on derivative contracts is made as per extant RBI guidelines.

**Wrong Way Risk**

Wrong way risk occurs when an exposure increase is coupled with a decrease in the credit quality of the obligor. The Group/Bank employs various policies and procedures to ensure that risk exposures are monitored. For example, as the MTM on a derivative contract increases in favour of the Bank, the counterparty may increasingly be unable to meet its payment, margin call or collateral posting requirements.

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**Impact of Credit Rating Downgrade**

In line with market convention, the Bank negotiates CSA terms for certain counterparties where the thresholds related to each party are dependent on their

External Credit Assessment Institution (ECAI) long term rating. Such clauses are typically mutual in nature. It is therefore recognised that a downgrade in the Group's rating could result in counterparties seeking additional collateral calls to cover negative MTM portfolios where thresholds are lowered.

**Quantitative Disclosures**

Particulars*	(in Rs '000)
	30-June-2016
Gross positive fair value of contracts	45,974,629
Netting benefits	-
Netted current credit exposure	45,974,629
Collateral held (including type, e.g. cash, government securities, etc.)	-
Net derivatives credit exposure	45,974,629
Potential future exposure	127,494,483
Measures for exposure at default or exposure amount under CEM	173,469,112
The notional value of credit derivative hedges	-
Distribution of current credit exposure by types of credit exposure:	-
- Interest Rates	29,900,578
- Fx	143,568,534

\* Based on current exposure method

**Regulatory Capital Instruments:** The Bank has not issued any Regulatory Capital Instruments during the period. Regulatory capital increases for the Bank generally take place via capital infusion from our Head Office and/or retention of Remittable Surplus for CRAR requirements.

**Disclosure Requirements for Remuneration:** In accordance with the requirements of the RBI Circular No. DBOD.NO.BC. 72/29.67/001/2011-12 dated 13 January 2012, the Asia- Pacific Head Office of the Bank has submitted a declaration to RBI that the Bank's compensation policies including that of CEO's, is in conformity with the Financial Stability Board principles and standards.

**7. Comparative figures**

Certain comparative figures have been reclassified to conform to the current year's preparation.