



OPERATIONAL GUIDELINES FOR ANIMATION, VISUAL
EFFECTS, GAMING, COMICS- EXTENDED REALITY
OPG - AVGC-XR POLICY 3.0 (2024 -29)



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1 Introduction

Karnataka shines as a leader in the dynamic AVGC-XR landscape, claiming 20% of India's Media & Entertainment industry. With 300+ specialized studios and 15,000+ professionals, the state provides a strong foundation for industry growth. The state's dedication to innovation is highlighted through government initiatives, such as India's first AVGC-XR Centre of Excellence, 5 animation institutes, 3 visual effects institutes and 12 gaming focused establishments.

In continuation of its commitment to fostering growth and innovation in the AVGC-XR sector, the Government of Karnataka, with the support of KITS (Karnataka Innovation and Technology Society) proudly introduces the AVGC-XR policy for 2024-29. The policy unfolds a new chapter of incentives and concessions designed to attract and support incentives in the State. Recognizing the evolving needs of the industry, KITS presents the Operational Guidelines for the AVGC-XR policy 3.0. These guidelines serve as a crucial tool to providing comprehensive definitions, formats and procedures for the seamless claiming and sanctioning of benefits outlined in the policy, whilst ensuring Government of Karnataka's visionary intentions into actionable practices, propelling the AVGC-XR industry towards substantiated growth and excellence.

2 General Instructions for Availing Financial Support

Only registered KAVGC companies can apply for the subsidies/incentives/grants available under this policy.

A first-time applicant needs to apply for registration as a KAVGC company by completing the KAVGC registration form. There is a one-time charge of INR 10,000 for KAVGC registration that should be paid as a demand draft in favor of "Managing Director, KITS". If the company has previously registered as a Karnataka company, there is no charge. Instead, the company may attach a copy of the Karnataka IT-BT registration certificate along with its application.

2.1 General Eligibility Criteria

Location: The company or entity should be registered in Karnataka Shops and Commercial Establishment Act, 1961.

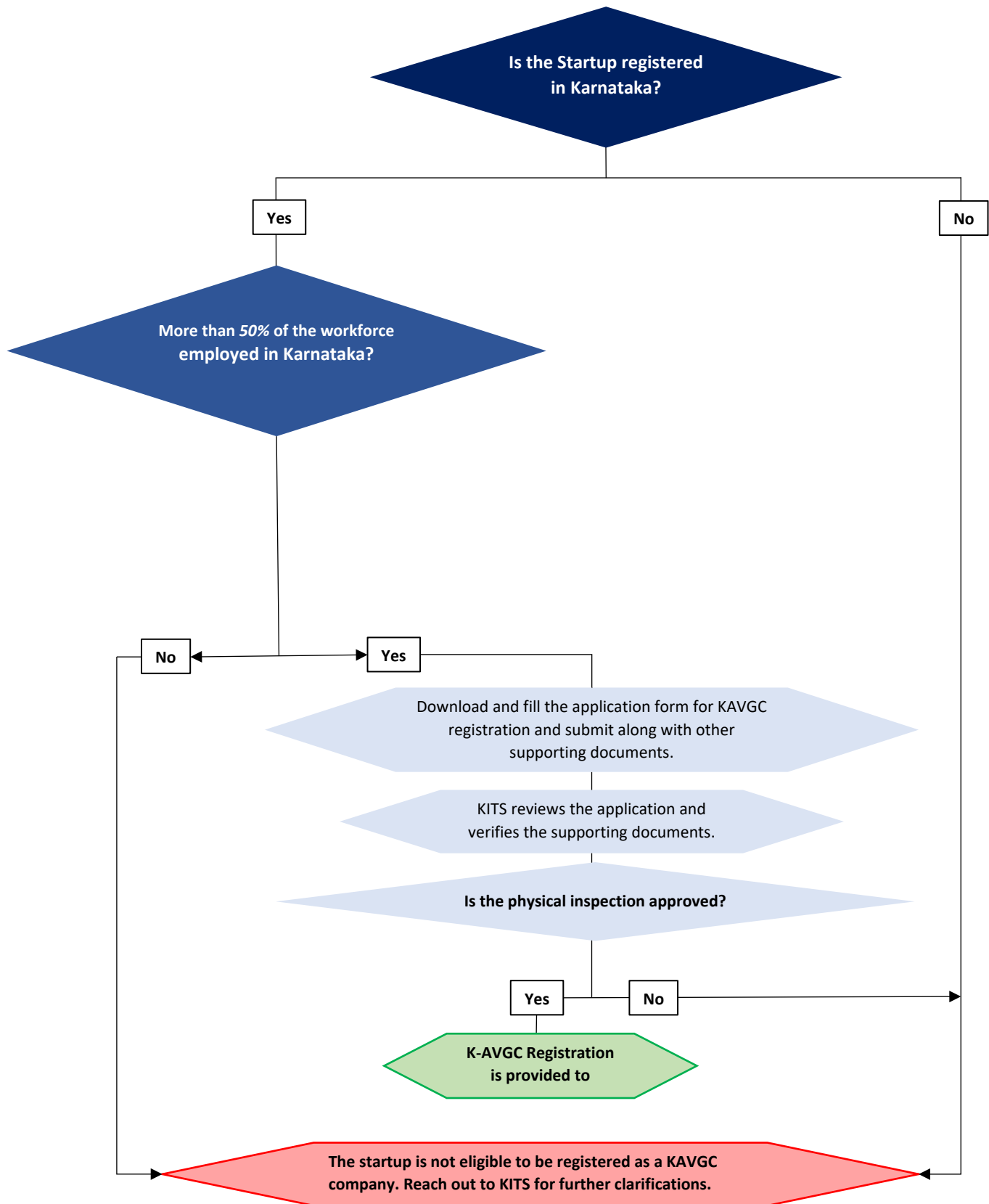
Employment: Company employs at least 50% of its total workforce in Karnataka, which will not include contract employees.

If the startup/company is already availing benefits for a particular type of incentive from other policies of the Government of Karnataka, the startup/company cannot apply for a similar benefit under the AVGC Policy.

2.2 KAVGC Registration Process

Interested companies can apply for KAVGC registration through the online portal [Company Registration Information - Department of Electronics Information Technology Biotechnology and Science & Technology \(karnataka.gov.in\)](https://karnataka.gov.in), attaching the soft copies of all supporting documents.

2.3 General Flow for Availing Incentives



2.4 Mandatory Documents

- Audited financial statements for the last one year of operations of the applicant and annual reports.
- Newly incorporated companies should produce detailed project reports on the business that includes financial projections for the next three years.
- Certified copy of Memorandum and Articles of Association / Certificate of Incorporation / Certificate of Commencement of business / Partnership Deed / Trust Deed / Bye-Laws / Registration Certificate from Registrar of firms / Societies, as the case may be.

2.5 Physical Verification

Physical verification typically involves an on-site inspection of the entity's premises by authorized officials. During this process, the inspectors assess various aspects such as infrastructure, facilities, equipment, workforce, and operational activities. They verify the information provided in the application or documents against the actual conditions observed on-site. Additionally, inspectors may interact with staff members, review records or documentation, and evaluate compliance with relevant regulations or guidelines. The goal of physical verification is to ensure the accuracy, authenticity, and compliance of the entity. Physical Verification will be conducted post verification of application and if deemed necessary by **Approval Committee**.

2.6 Sanction Process

Various incentives and subsidies will be granted to eligible companies based on evaluation done approved from **Approval Committee**.

3 Institutional Framework

3.1 Approval Committee

3.1.1 Constitution of Approval Committee

S.No	Designation	Role
1	Managing Director, KITS	Chairperson
2	General Manager 4, KITS	Convener
3	President of ABAI	Member
4	Representative from Gaming Associations	Member
5	Representative from Media & Entertainment Industry	Member
6	Representative from VR/AR/VFX Industry	Member
7	Other representatives from the AVGC-XR industry	Members

3.1.2 Roles and Responsibility of Approval Committee

- Significant decisions and amendments regarding the policy will be taken by the committee.
- Finalize other decision regarding the incentives.
- The Quorum of the approval committee should be three members present and voting and the decision will be by show of hands
- Grant approvals for incentive.
- Review and evaluate technical aspects for incentive applicability.
- Determine incentive calculation.
- Decisions pertaining to the AVGC-XR policy 3.0 and Karnataka's AVGC-XR sector fall under the purview of the Approval Committee.
- Other representatives from the AVGC-XR industry in the Approval Committee will be invited on a case-to-case basis depending on the technicality of the claim.

4 Financial Incentives

4.1 Skill Development & Job Creation

4.1.1 Reimbursement of Training Fees

4.1.1.1 Incentive Details

- Up to 50% reimbursement of the course expenses, which needs to be translated as a discount in course/training fee. The incentive is capped at INR 7.5 Lakhs per company for the policy period.

4.1.1.2 Eligibility Criteria

- Training should be provided by accredited colleges or institutes in Karnataka offering specialized courses in gaming, animation, or related fields.
- It is mandatory for each employee to obtain a certification for the training undertaken, such certification should be issued by a recognized college or training institute registered in the state.
- The entity claiming incentives and the certifying entity should not be same and related by any provisions whatsoever.
- This incentive cannot be availed if an entity has already availed the incentives provided by Skills Council for upskilling of talent force.

4.1.1.3 Requirements

- Course syllabus, mapping out the objectives, skills to be learned, and the duration of the course.
- Course should have a minimum duration of 20 hours to be eligible for the incentive.
- List of faculty members who will be teaching the course, including their qualifications, experience, and areas of expertise.
- Framework for how student performance will be assessed throughout the course, in alignment with industry needs.
- Implementation of a system for regular monitoring and feedback involving industry partners to ensure course relevance and quality.

4.1.1.4 Documents Required

- Application for Incentive
- Proof of Course Enrollment (Receipt or confirmation letter from the Accredited Training Institute/Companies)
- Student Enrollment Record
- Training Fee Invoice
- Training Certification
- Certification Issuing Entity Registration
- Statutory Declaration

4.1.1.5 Accreditation Entities

- Entities registered and recognized by Central or State Government

(Certification from relevant Accreditation entities indicates that the training provided meets industry standards and requirements.)

The eligibility of recognition provided by Accreditation entities to training institutes will be validated and approved by **Approval committee**.

4.1.2 Reimbursement of PF/ESI for KAVGC Companies

4.1.2.1 Incentive Details

- Reimbursement of employer's contribution towards Provident Fund (PF) / Employees State Insurance (ESI) of INR 3,000 per employee per month for the first year of employment of employees, capped at INR 12 lakhs per company for the policy period.
- This incentive is only applicable for new jobs created.

4.1.2.2 Eligibility Criteria

- Companies in the AVGC-XR sector registered and operating in Karnataka.
- The employer's contribution should be less than INR 10,000 per employee (Employee data will be verified through PF/ESI departments).
- The employee should be on the payrolls of the company.
- The company should not be operating for more than 3 years on the date of application.

4.1.2.3 Documents Required

- Application for incentive
- Copy of the KAVGC Registration Certificate
- Proof of Company Registration
- Certified letter from a Chartered Accountant mentioning all the employee's details, PF/ESI number, and PF/ESI contribution.
- Employment records for all new people employed a year from date of application.
- PF/ESI contribution receipts/challans for the claimed amount
- Statutory Declaration ‘

4.2 Early-Stage Startup Support Program

4.2.1 Incentive Details

- Up to 40% capped at INR 1,00,000 reimbursement towards all marketing expenses, per company during the policy period.
- Subsidized office or co-working space rentals covering up to 40% of the cost capped at INR 2,00,000, per company during the policy period.
- Up to 50% reimbursement towards server space rentals for one year, capped at INR 50,000, per company during the policy period.
- Up to 50% reimbursement on legal and compliance costs incurred during company setup, capped at INR 2,00,000, per company during the policy period.

S.No	Details	Percentage	Capped At
1	Marketing Costs	40%	1,00,000
2	Leasing Costs	40%	2,00,000
3	Operational Costs	50%	50,000
4	Compliance Costs	50%	2,00,000

4.2.2 Eligible Expenses

- **Marketing Costs**
 - a) Digital Marketing Campaigns
 - Search Engine Optimization cost
 - Social Media Advertisement
 - b) Traditional Marketing Materials
 - Newspapers Advertisements
 - Magazine Advertisements
 - Direct E-mail for Advertisements
 - Brochures
 - c) Marketing Content Creation
 - Videos
 - Posters
 - Blogs posts
 - d) Media Outreach Initiatives
 - Public Relation
 - Press Release
 - Participation in domestic exhibition, fair, expo, etc.
- **Leasing Costs**
 - a) Rental/Lease Expenses
 - Office space
 - Co-working spaces (First year membership costs are eligible)
- **Operational Costs towards Server Space Rentals**
 - a) Dedicated Server Space Rental (for hosting application)
 - b) Cloud Server Rental Fees
 - c) Data Storage Fees
- **Compliance Costs (during setup period)**
 - a) Legal Fees
 - Incorporation Fees
 - Audit Fees
 - b) Regulatory Compliance
 - AVGC-XR Industry Specific Regulations
 - Contract drafting costs
 - Cost related to General Data Protection Regulations (GDPR)

(Additional costs associated with the 4 categories mentioned under section 4.2.1 shall be evaluated for incentive applicability and approved by Approval Committee)

4.2.3 Eligibility Criteria

- The company should not be older than 2 years on the date of application.
- Must have a working prototype or MVP (Minimum Viable Product).
- Number of employees should be fewer than 15, employed full-time.

4.2.4 Requirements

- A detailed business plan including objectives, market research, and financial forecasts.
- Financial statements or ledgers showcasing expenditures.
- List of all current employees along with their job descriptions
- Receipts and invoices for any claimed expenses as per section 4.2.2

4.2.5 Documents Required

- Application for Incentive
- Copy of KAVGC Registration Certificate
- Proof of Company Registration
- Employment Records
- Supporting Invoices and Bills for expenses incurred
- Financial Statements/Records
- Statutory Declaration

4.3 Infrastructure

4.3.1 Incentive Details

4.3.1.1 Incentive Details for IT Infrastructure:

- Up to 20% of the cost incurred, capped at INR 20 Lakhs limited to up to 5 sanction per company during the policy period.
- Purchases of IT Hardware equipment applicable for an AVGC-XR company.
- Software and licenses are not eligible.

4.3.1.2 Incentive Details for Rental Benefits:

- Up to 20% of the cost incurred, capped at INR 5 Lakhs per company during the policy period.
- A company can claim this incentive either bi-annually or annually during the policy period.

4.3.2 Eligibility Criteria

- KAVGC Companies that are existing/newly established and operating in the Animation, Visual Effects, Gaming, and Comics (AVGC-XR) sectors.

4.3.3 Requirements

- Companies must purchase required and eligible equipment from Original Equipment Manufacturers (OEMs) and their authorized suppliers, resellers, and distributors only.
- The equipment purchased must not be refurbished or certified pre-owned.
- Companies must submit a valid GST invoice for the one-time purchase of hardware, gaming, and data storage equipment (Leasing and/or annual subscription will not be eligible under this incentive).
- Valid rent receipt with applicable GST or PAN number of landlord/leasing company should be submitted for the claim.

4.3.4 Documents Required

- Application for Incentive
- Copy of KAVGC Registration Certificate
- Proof of Company Registration
- Supporting Invoices and Bills for expenses incurred on Original Equipment Manufacturers (OEMs) and their authorized suppliers, resellers, and distributors
- Declaration of Equipment Status
- Rent Receipts of cost incurred for office space rental, including applicable GST or PAN number of the landlord/leasing company
- Statutory Declaration

4.4 IP Creation and Protection

4.4.1 Incentive Details

- Up to 50% of the costs for IP filing and legal consultation, capped at INR 20 Lakhs for International Intellectual Property and INR 5 Lakhs for Domestic Intellectual Property, during the policy period.

S.No	Details	Percentage	Capped At
1	International Intellectual Property	50%	20,00,000
2	Domestic Intellectual Property		5,00,000

- Intellectual Property Rights filed in India will qualify for Domestic IP incentive claim.
- Intellectual Property Rights filed in other nations outside India will qualify for International IP incentive claim.
- 50% of the incentive claim will be reimbursed after the filing of the IP. The remaining 50% would be released after the patent is granted.

4.4.2 Eligibility Criteria

- KAVGC companies operating in AVGC-XR related industries.

4.4.3 Requirements

- Original work that can be legally considered as Intellectual Property (IP).
- Proof of consultation with legal advisors specializing in IP (to ensure the work is indeed original and can be filed for IP protection).
- Active engagement or plan to engage in the process of IP filing, for copyright, trademark, or patent, relevant to their creation.
- Detailed records must be kept of the costs incurred for IP filing and legal consultation (Necessary for reimbursement).
- Documentation of all stages of IP creation and protection (Legal agreements, application forms, and receipts from relevant authorities or consultants).

4.4.4 Documents Required

- Application for Incentive
- Copy of KAVGC Registration Certificate
- Proof of Company Registration
- Copy of the patent filing application along with filing receipts
- Copy of the certificate of patent grant, if granted
- Copies of all applicable expense invoices and receipts
- Bank passbook / statement of account, highlighting all incurred expenses.
- Statutory Declaration

4.5 Production Grants

4.5.1 For Animation Film

4.5.1.1 Incentive Details

- Reimbursement of up to 20% of the qualified expenditure, capped at INR 50 lakhs per company, limited up to 2 sanction per company during the policy period.

4.5.1.2 Qualified Expenditure

- **Preproduction**
 - a) Concept Development
 - b) Scriptwriting
 - c) Concept Art and Design
 - d) Voice Acting
 - e) Storyboard
- **Production**
 - a) Animation and Visual Effects Production
 - b) Art and Design Production
 - c) Sound and Design Engineering
- **Postproduction**
 - a) Editing
 - b) Sound Mixing and Mastering
 - c) Color Grading
 - d) Quality Assurance and Testing
- **Marketing and Distribution**
 - a) Promotion and Advertising
 - b) Distribution Platform Fees
 - c) Public Relations Outreach
 - d) Localization
- **Miscellaneous**
 - a) Administrative and Overhead Expenses directly related to the project
 - b) Equipment rental or purchase cost (*Software expenses are not eligible*)
 - c) Insurance Cost related to the project

4.5.1.3 Eligibility Criteria

- KAVGC Companies actively engaged in the production of animation content, particularly films, are eligible for this incentive.

4.5.1.4 Requirements

- Animation film for which the grant is sought should be a minimum of 60 minutes in length.
- Animation film must adhere to industry standards and requirements.
- Distribution Strategy Plan (how the animation film will reach audiences, partnerships with distribution channels or platforms).
- Detailed documentation of production costs, timelines, and other relevant metrics must be maintained for audit purposes.

4.5.1.5 Documents Required

- Application for production grant
- Copy of the KAVGC Registration Certificate
- Purchase order / contract highlighting the scope of work and associated costs
- Proof of cost incurred on qualified expenditures for the project

- Proof of completion of production like valid Censor Board certificate or similar document which can confirm that the incentive being claimed for the project is completed
- Contract completion sign-off / letter confirming final delivery and acceptance by client for service contracts
- Statutory Declaration

4.5.2 For Animation Series

4.5.2.1 Incentive Details

- Reimbursement of up to 20% of the qualified expenditure, capped at INR 15 lakhs for 22 minutes, INR 10 lakhs for 11 minutes and INR 5 lakhs for 6 minutes, with a maximum cap of 30 lakhs per, limited up to 5 sanctions per company during the policy period.

Duration (Minutes)	Cap (INR)	Episodes	Sanction
22	15,00,000	Minimum 10	5
11	10,00,000		5
6	5,00,000		5

4.5.2.2 Qualified Expenditure

- **Preproduction**
 - a) Concept Development
 - b) Scriptwriting
 - c) Concept Art and Design
 - d) Voice Acting
 - e) Storyboard
- **Production**
 - a) Animation and Visual Effects Production
 - b) Art and Design Production
 - c) Sound and Design Engineering
- **Postproduction**
 - a) Editing
 - b) Sound Mixing and Mastering
 - c) Colour Grading
 - d) Quality Assurance and Testing
- **Marketing and Distribution**
 - a) Promotion and Advertising
 - b) Distribution Platform Fees
 - c) Public Relations Outreach
 - d) Localization
- **Miscellaneous**
 - a) Administrative and Overhead Expenses directly related to the project.
 - b) Equipment rental or purchase cost (*Software expenses are not eligible*)

c) Insurance Cost related to the project

4.5.2.3 Eligibility Criteria

- KAVGC companies actively engaged in the production of animation content, particularly series, are eligible for this incentive.

4.5.2.4 Requirements

- The animation series should comprise minimum of 10 episodes of at least 22 or 11 or 6 minutes each to be eligible for the grant.
- Animation Series must adhere to industry standards and requirements.
- Distribution Strategy Plan (how the animation series will be distributed, traditional broadcast mediums or online platforms).
- Detailed financial records, including invoices and expenditure reports, must be maintained, and submitted for verification.
- Evidence of the contractual obligations and deliverables should be submitted for an animation series being developed for a client.

4.5.2.5 Documents Required

- Application for production grant
- Copy of the KAVGC Registration Certificate
- Purchase order / contract highlighting the scope of work and associated costs
- Proof of cost incurred on qualified expenditures for the project
- Proof of completion of production like valid Censor Board certificate or similar document which can confirm that the incentive being claimed for the project is completed
- Contract completion sign-off / letter confirming final delivery and acceptance by client for service contracts
- Statutory Declaration

4.5.3 For VR/AR/VFX

4.5.3.1 Incentive Details

- Reimbursement of up to 20% of the qualified expenditure, capped at INR 50 Lakhs per company, limited up to 3 sanctions per company during the policy period.

4.5.3.2 Qualified Expenditure

- **Preproduction**
 - a) Concept Development
 - b) Scriptwriting
 - c) Previsualization and animatics
 - d) VR/AR/VFX technology research and planning
 - e) Storyboard
- **Production**
 - a) 3D modelling and animation
 - b) Virtual Environment creation
 - c) Augmented Reality Content Development
 - d) Motion Capture and Performance Capture

- **Postproduction**
 - a) Rendering and Compositing
 - b) Visual Effects enhancements
 - c) Sound design and audio production
 - d) Quality Assurance and Testing
- **Technology and Equipment** (*Software expenses are not eligible*)
 - a) VR/AR hardware purchase or rental costs
 - b) VR/AR headset, sensors and accessories purchase or rental costs
- **Marketing and Distribution**
 - a) Promotion and Advertising
 - b) Distribution Platform Fees
 - c) Public Relations Outreach
 - d) Localization
- **Miscellaneous**
 - a) Administrative and Overhead Expenses directly related to the project.
 - b) Insurance Cost related to the project.

4.5.3.3 Eligibility Criteria

- KAVGC companies specializing in Virtual Reality (VR), Augmented Reality (AR), or Visual Effects (VFX).
- The companies should be engaged in domestic productions, thus aiding the local VR/AR/VFX ecosystem.

4.5.3.4 Requirements

- Project under consideration must have a contract value above INR 10 Lakhs to be eligible for this incentive.
- Project must meet specific industry standards concerning quality regards to rendering quality, user interaction and overall visual experience.
- Detailed financial records, including invoices and expenditure reports, must be maintained, and submitted for verification.
- Adhere to any technical guidelines specified, like frame rates, resolution, and interactivity.
- VR/AR/VFX projects should align with any content guidelines set forth in the policy, such as cultural relevance or the intended audience demographic.
- Evidence of the contractual obligations and deliverables should be submitted for the VR/AR/VFX projects being developed for a client.

4.5.3.5 Documents Required

- Application for production grant
- Copy of the KAVGC Registration Certificate
- Purchase order / contract highlighting the scope of work and associated costs
- Proof of cost incurred on qualified expenditures for the project
- Proof of completion of production like valid Censor Board certificate or similar document (which can confirm that the incentive being claimed for the project is completed)

- Contract completion sign-off / letter confirming final delivery and acceptance by client for service contracts
- Statutory Declaration

4.5.4 For Game Development

4.5.4.1 Incentive Details for Mobile Gaming and Non-Mobile Gaming

- Reimbursement of up to 20% of the qualified expenditure capped at INR 5 Lakhs per company, limited up to 2 sanctions per company during the policy period.

4.5.4.2 Qualified Expenditure for Mobile Gaming and Non-Mobile Gaming

- **Preproduction**
 - a) Team Formation
 - b) Technology and Tools Selection
 - c) Legal Costs
- **Production**
 - a) Programming:
 - Bug fixing and optimization
 - Localization
 - b) Art and audio:
 - Final assets creation
 - Audio design and implementation
 - c) Testing and quality assurance (QA):
 - Playtesting
 - QA tools and services
 - d) Other post-production needs:
 - Marketing and PR
 - Game submission and certification
 - Post-launch support
- **Postproduction**
 - a) Programming:
 - Bug fixing and optimization
 - Localization
 - b) Art and audio:
 - Final assets creation
 - Audio design and implementation
 - c) Testing and quality assurance (QA):
 - Playtesting
 - QA tools and services
 - d) Other post-production needs:
 - Marketing and Public Relation
 - Game submission and certification
 - Post-launch support
- **Technology and Equipment** (*Software expenses are not eligible*)
 - a) Hardware purchase or rental costs

b) Development hardware and peripherals

▪ **Marketing and Distribution**

- a) Promotion and Advertising
- b) Distribution Platform Fees
- c) Public Relations Outreach
- d) Game Launch Events
- e) Localization

▪ **Miscellaneous**

- a) Administrative and Overhead Expenses directly related to the game development
- b) Insurance Cost related to the game development

4.5.4.3 Eligibility Criteria for Mobile Gaming and Non-Mobile Gaming

- KAVGC companies specializing in game development.
- Eligible for games developed after inception of the policy.
- Games produced must be marketed under the company's brand name.

4.5.4.4 Requirements for Mobile First Gaming

- A collective total of 2 Lakhs (200,000) downloads across iOS, Google Play, and Windows platforms to qualify for the incentive.
- Companies are expected to comply with technical standards related to gameplay regarding UI/UX and server response times, among others (General technical standards provided in 4.5.4.7).
- Preference given to games developed that incorporate localized content or themes, enhancing the cultural and social value.

4.5.4.5 Requirements for Non-Mobile Platforms

- PC games – minimum 5000 units sold/downloaded, Console Games - minimum of 2,500 units sold/downloaded, within the first 6 months.
- Minimum of 20 hours of gameplay per user, within the first 3 months.
- Minimum of 1,000 active monthly subscriptions maintained with a minimum 70% retention rate over a period of 3 consecutive months for games with a subscription model.
- Companies are expected to comply with technical standards related to gameplay. (General technical standards provided in 4.5.4.8)
- Preference given to games developed that incorporate localized content or themes, enhancing the cultural and social value.

4.5.4.6 Documents Required

- Application for production grant
- Copy of the KAVGC Registration Certificate
- Purchase order / contract highlighting the scope of work and associated costs
- Proof of cost incurred on qualified expenditures for the project
- Proof of completion of production like valid Censor Board certificate or similar document which can confirm that the incentive being claimed for the project is completed
- Contract completion sign-off / letter confirming final delivery and acceptance by client for service contracts
- Statutory Declaration

4.5.4.7 General Technical Standard for Mobile First Gaming

- **Platform Compatibility:**
Mobile games must be compatible with popular platforms such as iOS and Android, ensuring seamless performance across different device models and operating system versions.
- **Performance Optimization:**
Games should be optimized for mobile devices to ensure smooth gameplay, fast loading times, and efficient battery usage, regardless of device specifications.
- **Network Connectivity:**
Online features should be implemented with robust network connectivity, considering factors like latency, server stability, and bandwidth usage to provide a reliable multiplayer experience.
- **Security Measures:**
Stringent security measures should be implemented to protect user data, prevent cheating, and secure in-app purchases, complying with relevant privacy regulations and platform guidelines.
- **User Interface (UI) and User Experience (UX):**
The UI/UX design should be intuitive, responsive, and visually appealing, optimized for touch controls and various screen sizes to enhance user engagement and satisfaction.
- **Content Guidelines:**
Games should adhere to content guidelines, ensuring age-appropriate content, compliance with platform policies, and cultural sensitivity to appeal to diverse audiences.
- **Data Management:**
Data collection, storage, and processing should be conducted in accordance with privacy regulations, with strong encryption, access controls, and data integrity measures in place to protect user privacy.
- **Testing and Quality Assurance:**
Thorough testing should be performed across different devices and network conditions to identify and address bugs, performance issues, and usability concerns, with continuous updates based on user feedback.

4.5.4.8 General Technical Standard for Non-Mobile Platforms

- **Platform Compatibility:**
Games should be compatible with targeted platforms such as PC, console, or VR devices, ensuring optimal performance and compatibility with hardware configurations and operating systems.
- **Performance Optimization:**
Games should be optimized for the target platform to deliver high-quality graphics, smooth frame rates, and responsive controls, providing an immersive gaming experience.
- **Network Connectivity:**
For online multiplayer features, robust network infrastructure should be implemented to ensure low latency, stable connections, and fair gameplay experiences for all players.
- **Security Measures:**
Rigorous security measures should be implemented to protect against unauthorized access, cheating, and exploits, safeguarding user accounts, virtual economies, and sensitive game data.
- **User Interface (UI) and User Experience (UX):**

The UI/UX design should be tailored to the target platform and input devices, providing intuitive controls, clear navigation, and immersive visuals to enhance player engagement.

- **Content Guidelines:**

Games should adhere to content guidelines and age ratings, ensuring compliance with regional regulations, platform policies, and cultural sensitivities while delivering compelling and entertaining experiences.

- **Data Management:**

Strict data management protocols should be followed to handle user data securely, with encryption, access controls, and data protection measures in place to maintain user privacy and confidentiality.

- **Testing and Quality Assurance:**

Comprehensive testing should be conducted across different hardware configurations and gameplay scenarios to identify and resolve bugs, optimize performance, and ensure a polished gaming experience for players.

4.5.5 For International Production

4.5.5.1 Incentive Details

- Reimbursement of up to 20% of the qualified expenditure, capped at INR 1 crore per company, limited up to 2 sanctions during the policy period.

4.5.5.2 Qualified Expenditures

- The qualified expenditure for International Production Grant catering to Animation Films, Animation Series, AR/VR/VFX and Game Art Development will remain constant to the qualified expenditure for respective production grants pertaining to the following categories:
 - i. Preproduction
 - ii. Production
 - iii. Postproduction
 - iv. Technology and Equipment Procurement
 - v. Marketing and Distribution
 - vi. Miscellaneous Expenses (*Pertaining directly to the International Production project*)

4.5.5.3 Eligibility Criteria

- KAVGC companies specializing in the following international production categories:
 - i. Animated Films
 - ii. Animated Series
 - iii. AR/VR/VFX
 - iv. Game Art Development
- Animation Films - Minimum of 60 minutes
- Animation Series - Minimum 6 episodes with duration of at least 25 minutes or total of 150 minutes.

4.5.5.4 Requirements

- Contract value should be at least INR 2.5 crores to qualify for this incentive.

- Project should have confirmed partnership/contract with at least one international partner or client for the project, for which the incentive is being claimed.
- A company in the AVGC-XR sector registered outside India will be considered as international partner.
- Detailed financial reports and a clear budgetary outline must be submitted at various project milestones for monitoring.
- Projects should comply with international standards of quality and legal requirements. (General overview for international standards provided in 4.5.5.6)
- Universally acceptable content and culturally sensitive.

4.5.5.5 Documents Required

- Application for production grant
- Copy of the KAVGC Registration Certificate
- Purchase order / contract highlighting the scope of work and associated costs
- Proof of cost incurred on qualified expenditures for the project
- Proof of completion of production like valid Censor Board certificate or similar document which can confirm that the incentive being claimed for the project is completed
- Contract completion sign-off / letter confirming final delivery and acceptance by client for service contracts
- Statutory Declaration

4.5.5.6 General overview of international standards (not limited to)

4.5.5.6.1 Animation Film:

- **Quality and Originality:**
Quality of animation, storytelling, character development, and originality of content.
- **Production Techniques:**
Adherence to industry best practices in animation techniques, such as 2D, 3D, stop motion, and hybrid animation.
- **Technical Specifications:**
Compliance with technical specifications for animation production, including resolution, frame rate, color depth, and audio standards.
- **Cultural Sensitivity:**
Consideration of cultural diversity and sensitivity in storytelling and character portrayal to appeal to global audiences.

4.5.5.6.2 Animation Series:

- **Episodic Structure:**
Prioritize the development of engaging episodic content with strong narrative arcs and character-driven storytelling.
- **Production Efficiency:**
Efficient production pipelines and workflows to ensure consistent quality across multiple episodes while meeting deadlines and budget constraints.
- **Market Appeal:**
Understanding international market trends and audience preferences to create animation series with broad appeal and commercial viability.

4.5.5.6.3 VR/AR/VFX:

- **Immersive Experience:**

Focus on delivering immersive and interactive experiences in virtual reality (VR) and augmented reality (AR) applications, with high-quality visuals and seamless user interactions.

- **Technological Innovation:**
Integration of cutting-edge technologies and techniques to push the boundaries of VR, AR, and visual effects (VFX), including photorealistic rendering, spatial audio, and real-time interaction.
- **User Experience:**
Prioritization of user experience design principles to ensure intuitive navigation, comfort, and engagement in VR/AR experiences.
- **Cross-Platform Compatibility:**
Compatibility with multiple VR/AR platforms and devices to maximize reach and accessibility for global audiences.

4.5.5.6.4 Game Development:

- **Gameplay Mechanics:**
Emphasis on engaging gameplay mechanics, balanced game dynamics, and meaningful player interactions to ensure enjoyable and rewarding gaming experiences.
- **Visual and Audio Quality:**
High-quality graphics, animations, and sound design that enhance immersion and captivate players.
- **Platform Compatibility:**
Optimization for various gaming platforms, including consoles, PC, mobile devices, and emerging platforms like cloud gaming and virtual reality.
- **Monetization Strategies:**
Incorporation of sustainable monetization models, such as in-app purchases, subscriptions, and advertising, while maintaining fairness and transparency for players.

4.6 Quality Assurance

4.6.1 Incentive Details

- Reimbursement of up to 30% of the costs incurred for obtaining certifications, capped at INR 5 lakhs per company; limited to 3 sanction per company during the policy period.

4.6.2 Eligibility Criteria

- KAVGC Companies adhering to international or national quality standards.

4.6.3 Requirements

- Companies must undergo an audit to validate adherence to the chosen quality standard.
- Detailed reports that outline the quality measures taken, the certification aimed for, and the outcomes of any audits.
- A roadmap for achieving and maintaining the quality standards, with milestones and deadlines.
- Evidence that staff have been or will be trained to meet and uphold these quality standards.

4.6.4 Specific Certifications (not limited to)

- ISO 9001:2015 (Quality Management System)
- ISO/IEC 27001:2013 (Information Security Management)

- ESDM (Electronic System Design and Manufacturing)
- SEI-CMMI Registration (Software Technology Park of India)
- CMMI (Capability Maturity Model Integration)
- NASSCOM (Gaming Forum Certifications)
- Six Sigma
- PEGI
- WCAG
- ESRB rating
- UNITY or UNREAL Engine Certifications

4.6.5 Documents Required

- Application for Incentive
- Copy of KAVGC Registration Certificate
- Proof of Company Registration
- Audit Validation Documentation
- Detailed Quality Measures Report
- Staff Training Evidence (if applicable)
- Periodic Adherence Reports to quality standards and audit results
- Statutory Declaration

4.7 International Market Access

4.7.1 Incentive Details

- Reimbursement of up to 40% of the costs incurred for participating in international trade shows or expos, capped at INR 5 lakhs per company every year; limited up to 3 sanction per company during the policy period.
- A company has a total pool of INR 15 lakhs under this incentive, maximum incentive that can be availed in year is capped at INR 5 lakhs.
- This incentive will only cover expenses for a maximum of 2 employees per company/application.

4.7.2 Eligibility Criteria

- KAVGC Companies with at least one year of operation. This ensures that the startup claiming incentives under International Market Access has been operational for a minimum one year, understanding the market and ecosystem to best utilize funds being granted.

4.7.3 Requirements

- Companies must have a portfolio of work to showcase at the international event.
- A business case for attending the international event, including expected outcomes, and networking objectives.
- A breakdown of costs to attend, including booth setup, marketing materials, and travel.
- Cost incurred towards setting up of booth spaces, airfare and visa will be only eligible.
- Document to prove that economy class airfare with shortest flight path was chosen for travel.
- Proof of registration and attendance, such as tickets, boarding passes, and photos from the event.

- Companies must have an official invite from the event organizers.

4.7.4 Documents Required

- Application for Incentive
- Copy of KAVGC Registration Certificate
- Proof of Company Registration
- Event Invitation and Exhibition Participation Invoice for Trade Shows
- Any other supporting invoices / bills for expenses incurred
- Statutory Declaration

4.7.5 Examples of Trade Shows or Expos (not limited to):

- **Gaming Expos**
 - E3
 - GDC
 - India Game Developer Conference
- **Animation and VFX Expos**
 - SIGGRAPH
 - Annecy International Animated Film Festival
 - Effects America
- **Comic Conventions**
 - San Diego Comic-Con
 - New York Comic Con
 - Indian Comic Con
- **AR/VR Expos**
 - VR World Congress
 - Augmented World Expo
 - VRDays Europe

5 Incentives Applicability at a Glance

S.No	Incentive	Details	Cap Amount	Sanctions allowed	Remarks
1	Skill Development & Job Creation	Reimbursement of the course expenses	50% expenses capped at INR 7.5 Lakhs	-	Applicable for new jobs created
		Reimbursement of Provident Fund (PF) / Employees State Insurance (ESI)	INR 3,000 per employee per month for the first year of employment capped at INR 12 lakhs	-	Reimbursement to be translated as a discount in student fees.
2	Early-Stage Startup Support Program	Marketing Costs	40% capped at INR 1,00,000	-	Incurred during company setup, during the policy period.
		Leasing Costs	40% capped at INR 2,00,000		
		Operational Costs	50% capped at INR 50,000		
		Compliance Costs	50% capped at INR 2,00,000		

3	Infrastructure	IT Infrastructure	20% capped at INR 20,00,000	5	Purchases of IT Hardware equipment applicable for an AVGC-XR company. Software and licenses are not eligible.
		Rental Benefits	20% capped at INR 5,00,000	2	
4	IP Creation and Protection	International Intellectual Property	50% capped at INR 20,00,000	-	Costs for IP filing and legal consultation
		Domestic Intellectual Property	50% capped at INR 5,00,000		
5	Production Grants				
5.1	For Animation Film	Reimbursement of the qualified expenditure	20% capped at INR 50,00,000	2	Project cost incurred during the policy period
5.2	For Animation Series	Reimbursement of the qualified expenditure	20% capped at INR 15,00,000	5	Project cost incurred during the policy period
5.3	For VR/AR/VFX	Reimbursement of the qualified expenditure	20% capped at INR 50,00,000	3	Project cost incurred during the policy period
5.4	For Game Development	Reimbursement of the qualified expenditure	20% capped at INR 5,00,000	2	Project cost incurred during the policy period
5.5	For International Production	Reimbursement of the qualified expenditure	20% capped at INR 1 crores	2	Project cost incurred during the policy period
6	Quality Assurance	Reimbursement of the qualified expenditure	30% capped at INR 5,00,000 per company	3	Project cost incurred during the policy period
7	International Market Access	Reimbursement of the qualified expenditure	40% capped at INR 5,00,000 per company	3	Project cost incurred during the policy period

6 Skill Advisory Committee for Emerging Technologies

The Skill Advisory Committee for Emerging Technologies comprising an esteemed panel of experts representing industry, academia, and government has been formed with the objectives of the identification of skilling requirements in emerging technologies; fostering industry collaboration; policy advocacy and action-oriented recommendations; documentation and communication mechanisms; and expected outcomes for stakeholders.

6.1 Working Group for the AVGC-XR sector

Due to the AVGC-XR sector's exponential growth in recent times, sector's distinct skill sets and its burgeoning relevance in the State's creative and tech ecosystems, a separate Working Group under the Committee has been formed specifically for the AVGC-XR sector in identifying and addressing the specific skill gaps and industry needs. The working group will not only focus on improving the current infrastructure and schemes available for the sector, but also implement new initiatives.

In addition to the working group, the Government of Karnataka has established many tie ups with the industry and academia to impart next gen skills to students and entrepreneurs in the AVGC-XR sector in the State.

7 Holistic Curriculum Development

Partnering with global educational institutes and industry, the intention is to curate a world-class curriculum that caters to diverse needs, from animation and visual effects to business management. The aim is not just to meet the present industry standards but to also preempt future trends by integrating emergent technologies like Metaverse, AI, machine learning, and blockchain. The industry endorsed courses will be designed holistically comprising these areas.

- Animation & Visual Effects
- Game Design & Development
- Virtual Reality (VR) & Augmented Reality (AR)
- eSports (Game of Skill)
- Digital Art & Illustration
- Sound Design & Engineering
- Intellectual Property & Legal Framework
- Business & Monetization Strategies
- Data Analytics & User Experience
- Post-Production & Editing
- Quality Assurance & Testing

8 Vocational Training

Formal education will be complemented by comprehensive vocational training in partnership with Industry and Academia. Testing labs and e-learning platforms are slated to be the primary vehicles driving this vision. This initiative is crucial in ensuring that opportunities in the AVGC and XR sectors reach emerging clusters of the state, particularly in rural regions, and underprivileged areas.

9 Innovative Platforms for Talent Recognition

Hackathons and startup challenges will be organized in collaboration with industry leaders, where prodigious talent can shine. The Government of Karnataka will organize several events such as GAFX, Bengaluru Tech Summit (BTS), E-Gaming Summit etc. which will include specific hackathons, startup challenges and subsequent rewards for the winners.

10 Centre of Excellence (CoE) for AVGC-XR

The Government, in partnership with ABAI (Association of Bangalore Animation Industry), has setup a Centre of Excellence for AVGC-XR in 2018, which has been playing an active role in bolstering the sector's infrastructure. The CoE operates on a PPP model, aiming to craft a dynamic ecosystem for the AVGC-XR industry. The CoE also houses a Digital Postproduction Lab and an AVGC-XR Finishing School which provides incubation and acceleration for budding startups of the State. There are further plans to expand the CoE and its facilities in other emerging clusters of the State such as Mangalore, Mysore, Hubli/Dharwad Clusters.

As a follow-up to the hugely successful first of its kind AVGC-XR centre of excellence in the country, a version 2.0 of the same is proposed as a part of this policy which will encompass new emerging technologies along with the existing framework & focus on a future ready production & skills enhancement setup with emphasis being on encouraging startup culture & incubation centers. The AVGC-XR centre of excellence 2.0 will also provide a platform to national and international gaming companies, Venture Capitalists, PE funds and startups to conduct international events.

11 Digital Art Centers (DACs) 2.0

Recognizing fine art schools as talent bed for the AVGCXR sector, the Government of Karnataka has taken strides to bridge the awareness gap about digital art and animation careers. Currently there are 27 DACs functioning in the State in partnership with various academic institutes of the State and plans are to upgrade the current engagement infrastructure with the DAC framework to adapt and use new tools and technologies like Generative AI and Machine learning. This endeavor is poised for expansion, targeting 50 more fine art colleges across Karnataka.

12 Technology Business Incubators (TBIs)

TBIs play an important role in fostering innovation and entrepreneurship in the technology sector by supporting startups and early-stage enterprises in Karnataka. Currently there are 4 TBIs which are associated with renowned academic institutions or research centers of the State such as The Indian Institute of Science, Manipal Academy of Higher Education, Ramaiah University of Applied Sciences, and others.

On a similar model, The Government of Karnataka plans to introduce new TBIs specifically for the AVGC-XR sectors in the emerging clusters of the State i.e., Mangalore, Mysore, Hubli/Dharwad Clusters. These TBIs will also provide co-working spaces for the new AVGC-XR companies. with a funding support of up to INR 10 Crore per TBI for over a period of 5 years. The TBIs shall forge a strong link between R&D and commercialization of technologies in Academic/Technical/ R&D Institutions.

13 Regulatory Innovation

The Karnataka Innovation Authority, with its mandate to address regulatory challenges and promote innovation, aspires to establish Regulatory Sandboxes specifically for the AVGC-XR sector to provide startups and businesses a structure environment to test their innovations without being confined by existing regulatory frameworks. These sandboxes once implemented are expected to yield multiple positive outcomes such as fast track development and deployment of AVGC-XR products & services and deeper collaboration between industry players, regulators, and policymakers, ensuring continuous improvement in regulatory frameworks with the growth of sector.

14 AVGC-XR Park (SEZ cum tourism center)

The state will aspire to establish a dedicated AVGC-XR Park in Bengaluru in the form of Special Economic Zones (SEZ) under Public- Private Partnership (PPP) model to offer companies multiple fiscal incentives. The AVGC-XR Park will be a pioneering world class hub for innovation, creativity and enterprise and will feature advanced infrastructure, reduced property taxes, and subsidized utility rates, creating an inviting ecosystem for both hardware manufacturing and software development companies.

The park will house spaces for cutting edge studios and production houses, software development, game design & development etc.; incubation centers; training institutes; entertainment zones and convention centers.

The park will also integrate tourism with elements like interactive AVGC-XR museums, themed entertainment zones based on popular animations and games, and annual festivals, conventions and events attracting global participants.

The SEZ may also allocate nearby land to premier real estate developers to create modern residential complexes, amenities including shopping, entertainment, and recreational spaces along with green parks and open spaces ensuring sustainability. The government will plan to implement smart-grid technology across the park which will ensure efficient energy consumption, reducing operational costs and minimizing environmental impact. Green buildings with energy-efficient designs will also be a standard feature of this SEZ.

15 Center of Excellence (CoE) for Gaming

Karnataka aims to serve as the epicenter for innovation, research, and development in the gaming sector. It will house state-of-the-art facilities such as high-performance computing clusters, simulation labs, and testing zones to support all aspects of game development from concept to deployment. Educational programs and workshops will be an integral component, partnering with academic institutions to offer specialized courses in game design, animation, and responsible gaming practices. Cutting-edge R&D will be conducted in collaboration with industry experts, focusing on emerging trends like augmented reality, virtual reality, and AI in gaming.

Functionally, the CoE will adopt a multi-stakeholder approach involving the government, industry, and academia. It will offer incubation support for startups, including mentorship from industry veterans and access to funding channels. Regular events like hackathons, game jams, and industry conferences will be organized to foster innovation and networking. Regulatory guidelines will be developed in collaboration with legal experts to ensure responsible and ethical gaming practices. A dedicated team will continuously monitor market trends, ensuring that the CoE's objectives and activities align with both technological advancements and societal needs. Through these multi-faceted operations, the CoE will strive to elevate Karnataka as a global hub for responsible and innovative gaming.

15.1 Game Development Center

A specialized Game Development Center will serve as a hub for game designers, developers, artists, and other industry experts to collaborate, create, and innovate the realm of gaming. The center will provide essential resources, state of the art technologies, mentorships, and training

programs. Moreover, an integration of Game Development Centers with Center of Excellence for Gaming will further amplify growth and innovation of the gaming sector. The gaming development centers within the CoE, will have a focused commitment to fostering talent, research, and technology advancements, providing a structured framework for game developers to thrive and contribute to the flourishing landscape of E-Gaming.

16 Global Innovation Alliance

The Global Innovation Alliance (GIA) initiative by the Karnataka government serves as a pivotal tool in bolstering the state's AVGC-XR sector. By fostering collaborations with international tech hubs and innovation epicenters across 32+ countries, GIA opens up avenues for enriching exchanges of knowledge and expertise. Through these partnerships, Karnataka gains access to cutting-edge technologies, industry best practices, and market insights, facilitating the assimilation of advanced tools and methodologies within the AVGC-XR sector. Moreover, GIA facilitates co-investments and market access for Karnataka's AVGC and XR products, providing opportunities for co-funded ventures and showcasing the state's unique innovations on a global platform. Overall, GIA serves as a catalyst for the growth and internationalization of Karnataka's AVGC-XR sector, reinforcing its position as a leader in innovation and creativity on the global stage.

16.1 GIA's Partnerships and Collaboration

Europe	Asia	Ocenia	North America	South America	Africa
France	UAE	Austria	Canada	Dominican Republic	South Africa
Sweden	Oman				
United Kingdom	Myanmar				
Denmark	Vietnam				
Netherlands	Sri Lanka				
Finland	Japan				
Belgium	South Korea				
Lithuania	Singapore	New Zealand	United States of America	Argentina	Tunisia
Poland	Israel				
Germany	Malaysia				
Switzerland	Thailand				
Austria					
Italy					

17 AVGC-XR IP Marketplace

A standout feature in the state's integrated strategy is the creation of a state-level AVGC-XR IP marketplace, streamlined through public-private partnerships. This marketplace is envisioned as the central hub for all IP transactions—buying, selling, and licensing—specifically catering to the

AVGC and XR domains. Utilizing blockchain technology, it will ensure a secure and transparent transactional environment, offering peace of mind to all participants.

17.1 Technology Transfer Offices (TTOs)

Integrating the concept of Technology Transfer Offices (TTOs) within this marketplace will further refine its offerings. TTOs, traditionally associated with academic and research institutions, specialize in facilitating the commercialization of innovations, safeguarding intellectual property rights, and promoting collaborations between research entities and industries. In the context of the AVGC-XR IP marketplace, TTOs will serve as intermediaries, ensuring that innovations, especially those originating from academic settings, are seamlessly transitioned into commercial ventures, while also providing IP advisory and protection services. This fusion of TTOs into the marketplace ecosystem underscores the state's commitment to bridging the gap between invention and commercialization.

17.2 Global Innovation Alliance support for AVGC-XR IP Marketplace

The GIA aligned with the TTOs within the AVGC-XR marketplace has potential to form a dynamic ecosystem that propels AVGC companies in Karnataka towards international market access. Through its global collaboration, networking initiatives provides exposure and co-investment activities. The AVGC-XR IP marketplace will ensure transparency for international stakeholders creating an effective and efficient ecosystem for AVGC-XR companies. The Technology Transfer Offices that are to be established within the AVGC-XR IP marketplace, will act as an intermediary to ensure seamless transition of innovation to the international market.

18 KITVEN Fund 4

The Government of Karnataka has been proactive in devising mechanisms that offer both incentives and direct financial support to businesses in these domains. One of the most prominent initiatives in this context is the Karnataka Information Technology Venture Capital Fund: KITVEN Fund-4 (AVGC).

The Karnataka Information Technology Venture Capital Fund: KITVEN Fund-4 (AVGC) stands as a cornerstone initiative within the operational guidelines for AVGC-XR Policy 3.0. With an allocated corpus of INR 20 crore, this venture capital fund, established through collaborative efforts with other entities in the state, is specifically tailored to support enterprises operating in Animation, Visual Effects, Gaming, Comics, Extended Reality, and associated sectors within Karnataka. Initial investments, ranging from INR 50 lakhs to INR 100 lakhs, are strategically allocated to catalyze growth during the initial stages of development. Recognizing potential and performance, the fund allows for follow-on investments of up to INR 200 lakhs, underscoring its commitment to fueling the expansion and success of promising ventures in the AVGC-XR domain. Beyond its financial contributions, KITVEN Fund-4 (AVGC) embodies the state's proactive approach towards nurturing innovation and fostering a robust ecosystem for AVGC-XR enterprises to thrive and excel.

19 AVGC-XR Products Testing Labs

The multiplatform gaming technology sector is ripe with opportunities and represents a rapidly growing subset of the AVGC-XR industry. AVGC-XR Products Testing Labs will be in the Center of Excellence for Gaming to ensure the quality and performance of mobile-centric AVGC-XR products. These labs will be complemented by specialized training programs aimed at skill development in multiplatform products. These measures will ensure that Karnataka is not just a hub for AVGC and XR technologies but is also at the cutting edge of the fast-evolving multiplatform gaming sector.

20 Glossary

Abbreviated	Expanded
AI	Artificial Intelligence
AR	Augmented Reality
AVGC-XR	Animation, Visual Effects, Gaming and Comics - Extended Reality
BTS	Bengaluru Tech Summit
C&I	Commerce and Industry
CA	Chartered Accountant
CoE	Centre of Excellence
DAC	Digital Art Center
ESI	Employee State Insurance
GAFX	Games, Animation and Visual Effects
GIA	Global Innovation Alliance
IP	Intellectual Property
IT, BT & ST	Information Technology, Biotechnology and Science Technology
KAVGC	Karnataka Animation, Visual Effects, Gaming and Comics
KITS	Karnataka Innovation and Technology Society
KPI	Key Performance Indicator
LLP	Limited Liability Partnership
MD	Managing Director
MOOC	Massive Open Online Course
MoUs	Memorandum of Understandings
MVP	Minimum Viable Product
NASSCOM	National Association of Software and Service Companies
OPC	One Person Company
PC	Personal Computer
PF	Provident Fund
R&D	Research and Development
SEZ	Special Economic Zone
ST/SC	Scheduled Caste/Scheduled Tribes
TBI	Technology Business Incubators
T-HI	Technology Host Institutions
TTO	Technology Transfer Offices
VFX	Visual Effects
VR	Virtual Reality

21 Definitions

AVGC-XR Sector - The AVGC-XR sector is represented by companies, joint ventures, focus groups, consultants and creative professionals engaged in the business of conception, production, post-production, media and intellectual property rights management, publishing and marketing of animation, visual effects, special effects, editing, digital game development including mobile, console, desktop games (excluding gambling) and comics content. They also actively promote the products and related services such as development of software research, development of AVGC-XR subjects, related technology, and its business management.

AVGC-XR Company - Any company in the AVGC-XR sector as defined above.

Accredited Training Institutes – Accredited Training Institutes are legitimizing organization within an industry that intends to earn the educational status, through the application for accreditation.

Accredited Training - Accredited training allows individuals to achieve certification following completion of a course of your own design in a particular skill or sector.

KAVGC Company - Any AVGC-XR company (as defined above), which is working out of Karnataka and registers with KITS is referred as a KAVGC Company. Through this registration, the company becomes eligible to avail any incentives or subsidies mentioned in this policy.

Policy Period – The duration for which this policy will remain enforced, either 5 years from the time this policy is launched or the launch of a newer policy that supersedes this policy, whichever is earlier.

ABAI - It is an association originally started by and for Bengaluru Animation Industry was formed in 2006, is a non-profit association. It has since spread its wings to become a strong catalyst to promote the Animation, Visual Effects, Gaming, Comics and Extended Reality (AVGC-XR) business activities in India.

Animation - Animation is the technology of displaying frames in succession to create an illusion of motion. Animation is used in entertainment, education, design, game development, simulations, etc. It is basically categorized into 2D traditional animation that is done manually by hand and 3D-digital animation that is done by using various software applications. It is finding its use in mobiles, software applications, movie visual effects, visual communication, and advertising.

Animation Entertainment - Animation Entertainment includes animated movies, TV broadcast of animated cartoon series through 2D cell animation (using 2D bitmap or vector graphics), 3D CGI animation or 3D motion capture animation.

VFX - Stands for Visual effects. It is the grouping of various processes by which imagery can be created without shooting for it live. It can also be used to enhance a live footage to exhibit sequences which is impossible or not feasible to shoot live.

VR - Stands for Virtual Reality. It is an artificial environment that is created with software and presented to the user in such a way that the user suspends belief and accepts it as a real environment. On a computer, virtual reality is primarily experienced through two of the five senses: sight and sound.

AR - Stands for Augmented Reality. It is the integration of digital information with the user's environment in real time. Unlike virtual reality, which creates a totally artificial environment, augmented reality uses the existing environment and overlays new information on top of it.

MR - Stands for Mixed Reality. It is sometimes referred to as hybrid reality, is the merging of real and virtual worlds to produce new environments and visualizations where physical and digital objects co-exist and interact in real time.

XR – Stands for Extended Reality. It encompasses a range of immersive technologies that merge the physical and digital worlds such as VR, AR, and MR.

Game Development - Game development relates to development of video games, interactive games, simulation games, electronic games, mobile-based games, online games etc. Video Games are software applications that involve interaction with a user interface to generate visual feedback on a display device. Interactive games are used for entertainment, education (edutainment) and for non-entertainment applications such as serious games (games that are designed primarily to convey information or a learning experience of some sort) and simulation. The electronic systems used to play video games are known as platforms. For example, personal computers, video game consoles such as PlayStation, Xbox and Nintendo Wii, handheld consoles such as Nintendo Gameboy Advance, PlayStation Portable (PSP) and mobile devices such as mobile phones and iPhones. The Internet is also a platform for various forms of web-based games. For the purpose of clarity, gambling software applications are not a part of interactive games.

- Online: Online games are played on the internet through web portals. These games range from basic single-player games to multiplayer online role-playing games (MMORPG). MMORPGs enable several players to simultaneously interact during a game on the Internet.
- Mobile: These games are played on mobile telephone devices. Mobile games typically cost under INR 500 and are sometimes adapted from popular console or PC games.
- PC: Games in this segment are played on a PC, which is usually upgraded with gadgetry such as an additional graphics card for an enhanced gaming experience.
- Console:s This segment of gaming requires a separate hardware known as a console that is loaded with the game's software. The main brands in this segment include the Sony PlayStation, Nintendo Wii, and Microsoft Xbox. Typically, a generation of console lasts for a few years, also called console cycles, and is upgraded or replaced by a new generation of gaming hardware and software.

Game of Skill: A game whose outcome is predominantly determined by the knowledge, training, expertise, and experience of the participant.

Game of Chance: A game whose outcome is not predominantly determined by the knowledge, training, expertise, and experience of the participant but it is determined by the chance and luck.

MMORPG - Massively multiplayer online role-playing games. These are role-playing games where thousands of gamers play strategy or action theme-based games in a virtual and persistent end-user through the World Wide Web, by way of a web browser or other web-enabled software like internet television clients, micro blogging clients and RSS readers.

Comics - The term derives from the mostly humorous early work in the medium and came to apply to that form of the medium including those far from comic. The sequential nature of the pictures, and the predominance of pictures over words, distinguishes comics from picture books. Comics are combination of cartoon with a story line, laid out in a series of pictorial panels across a page or a digital media and concerning a continuous character or set of characters, whose thoughts and dialogues are indicated by means of "balloons" containing written speech. The comic strip form can be employed to convey a variety of messages (e.g., advertisements, value education, entertainment, etc.)

Direct to DVD - A film that is released direct-to-video (also known as made-for-video, straight-to video and straight-to-DVD) is one which has been released to the public on home video formats (historically VHS) before or without being released in movie theaters or broadcast on television.

21.1 Terms Used in Animation

Pre-production - Pre-production is the process of fixing some of the elements involved in a film. Many of the key elements such as principal cast members, director and cinematographer are set. By the end of pre-production, the screenplay is usually finalized. During pre-production, the script is broken down into individual scenes, storyboards and all the locations, props, cast members, costumes, special effects and visual effects are identified. An extremely detailed schedule is produced, and arrangements are made for the necessary elements to be available to the filmmakers at the appropriate times. Sets are constructed, the crew is hired, financial arrangements are put in place and a start date for the beginning of principal photography is set.

Production - During the 'Production' phase, the movie is actually made. For live action movies, principal photography takes place, for animated movies actual process of modelling, animation etc. takes place.

Postproduction - Post-production is many different processes grouped under one name. These typically include:

- Writing, (re)recording, and editing the soundtrack
- Adding visual special effects - mainly computer-generated imagery (CGI) in live action movie footage
- Sound design, sound effects, ADR, Foley, and music, culminating in a process known as sound re-recording or mixing with professional audio equipment
- Transfer of color motion picture film to video or DPX with a telecine and color grading (correction) in a color suite
- The post-production phase of creating a film usually takes longer than the actual shooting of the film and can take several months to complete because it includes the complete editing, color correction, and the addition of music and sound.

Idea/Story - Story writer comes up with an idea. A story is written on the idea adding dramatic scenes, sequences, characters, themes etc.

Storyboarding - A storyboard is a graphic organizer in the form of illustrations or images displayed in sequence for the purpose of pre-visualizing a motion picture, animation, motion graphic or interactive media sequence.

Animatic Review - In animation and special effects work, the storyboarding stage may be followed by simplified mock-ups called "animatics" to give a better idea of how the scene will look and feel with motion and timing. At its simplest, an animatic is a series of still images edited together and displayed in sequence with rough dialogue (i.e., scratch vocals) and/or rough soundtrack added to the sequence of still images (usually taken from a storyboard) to test whether the sound and images are working effectively together. This allows the animators and directors to work out any screenplay, camera positioning, shot list and timing issues that may exist with the current storyboard.

Design - In this stage look of the movie is designed. Designs of how the characters will look, how the world where the story takes place, how the sound is going to be, is decided. Design goes through multiple iterations until finalizing.

Layout - Once the storyboards have been approved, they are sent to the layout department which then works closely with the director to design the locations and costumes. With this done they begin to stage the scenes, showing the various characters' positions throughout the course of each shot. Environment assets and camera are setup in each shot and flow of camera movement is decided.

R&D - Depending on the theme/period of movie story, research is done to finalize the look of assets like clothes, architecture. These assets should make the look of movie more authentic.

Modelling - 3D modeling is the process of creating a 3D representation of any surface or object by manipulating polygons, edges, and vertices in simulated 3D space. 3D modeling can be achieved manually with specialized 3D production software that lets an artist create and deform polygonal surfaces, or by scanning real-world objects into a set of data points that can be used to represent the object digitally. All the 3D characters, assets, environment assets are created following the same process.

Texturing - Texturing is the process of adding colors, texture, skin, etc. on the 3D models.

Rigging: In its simplest form, 3D rigging is the process of creating a skeleton for a 3D model so it can move. Most commonly, characters are rigged before they are animated because if a character model doesn't have a rig, they can't be deformed and moved around.

Animation - After the 3D models are rigged, animators add life to them by setting different poses. These poses follow a timeline. When played in sequence they look like an animating live character.

FX - Special effects like fire, explosion, water flow, wind is added on top of character animation to give it a sense of realism.

Lighting - In this phase lighting effects are added to the scenes. Ambient light, specular reflections and shadow effects create realistic environment for the shots.

Rendering - Rendering or image synthesis is the process of generating an image from a 2D or 3D model (or models in what collectively could be called a scene file) by means of computer programs. A scene file contains geometry, viewpoint, texture, lighting, and shading information as a description of the virtual scene. The data contained in the scene file is then passed to a rendering program to be processed and output to a digital image or raster graphics image file. These image files collectively make a video file.

Compositing - Compositing is the combining of visual elements from separate sources into single images, often to create the illusion that all those elements are parts of the same scene. At this stage all the different elements like animated characters, background, environment etc. are integrated together. Background is created in Matte Painting stage of production.

2D FX/ Motion Graphics - At this stage special effects, texts, titles etc. are integrated with the shots.

Color Correction - Depending on the mood of the scene, shots are color corrected. Life nighttime shots are given bluer tint, daytime shots are made more yellowish. Happy moments in movie are shown with bright and vivid range of colors whereas sad moments as shown with dull colors.

Final Output - Finally, we get the final output as movie.

21.2 Terms Used in VFX Production

Story: Story is written with multiple iterations over scene, shots, and character development.

Story Board: Story is converted to a set of drawings showing different instances in the story line.

Concept Art: Concept arts are the drawings showing the look of the characters, sets, world where the story takes place.

2D Animatic: A 2D animatic sequence is created out of the story board and concept arts to check the overall flow of the events in the story.

Assets Creation: The 3D models of the characters, world, environment, clothes etc. are created in this stage. Other than computer 3D models, physical assets are created like weapons, antiques, and other items as per the story.

Modelling: The 3D models created in assets creation phase are update with texturing and rigging to make them usable in the later stages.

UVTexturing: Texturing is adding colors or textures on top of 3D models. Animals, humans' 3D models are layered with skin, clothes like textures.

Rigging: In this stage 3D models are added with skeleton structures to animate them. It is very much like adding strings on puppets. These skeletons are then used to add animation to them.

FX: Special effects like explosions, storms etc. are created in this stage.

Matte Painting: A matte painting is a painted representation of a landscape, set, or distant location that allows filmmakers to create the illusion of an environment that is not present at the filming location. Backgrounds paintings like dramatic, beautiful looking skies, mountains, cityscapes are created in this stage. They are used to enhance the world look of the movie.

Shooting Reference: For special effects, real world reference videos are captured in this stage. They include shots on fire, animal movements, explosions, flying birds, smokes etc. These videos are then used as a reference to create computer generated special effects.

Shooting Live Action: Life action videos of the movie, also called principal photography happens in this stage. These videos are shot with actual actors either at actual locations or inside studios.

Roto: Rotoscoping (often abbreviated as "roto") has often been used as a tool for visual effects in live-action movies. By tracing an object, the moviemaker creates a silhouette (called a matte) that can be used to extract that object from a scene for use on a different background.

BG Prep: Chroma key compositing, or chroma keying, is a special effects/ post-production technique for compositing (layering) two images or video streams together based on color hues (chroma range). The technique has been used heavily in many fields to remove a background from the subject of a photo or video – particularly the newscasting, motion picture and videogame industries.

Match Move: In cinematography, match moving is a cinematic technique that allows the insertion of computer graphics into live-action footage with correct position, scale, orientation, and motion relative to the photographed objects in the shot.

Set Extension: Digital additions to actual performing environments.

Lighting: In this phase lighting effects are added to the scenes. Ambient light, specular reflections and shadow effects create realistic environment for the shots.

3D Live Animatic: After all these effects are added, we get a 3D live action video.

Animation: The 3D models of animals or monsters created to add an extra element of dramatization are animated in this stage.

3D Render: Rendering or image synthesis is the process of generating an image from a 2D or 3D model (or models in what collectively could be called a scene file) by means of computer programs. A scene file contains geometry, viewpoint, texture, lighting, and shading information as a description of the virtual scene. The data contained in the scene file is then passed to a rendering program to be processed and output to a digital image or raster graphics image file. These image files collectively make a video file.

Compositing: Compositing is the combining of visual elements from separate sources into single images, often to create the illusion that all those elements are parts of the same scene. At this stage all the different elements like animated characters, background, environment etc. are integrated together. Background is created in Matte Painting stage of production.

Final Render: Finally, the videos are rendered to frames/images which collectively makes the movie.

22 Annexures

22.1 Annexures for Application Forms

22.1.1 Application form for KAVGC company registration

S.No	Details	
1	Name of the company:	
2	Full Address for communication:	
3	Constitution of the company (please specify whether proprietorship/partnership firm/company etc.):	
4	Details of Promoters/Directors/Key Executives:	
5	Details of Branch Offices / Units:	
5.1	Full Address	
5.2	No. of Persons Employed	
6	Details of Employees:	
6.1	Total number of Employees	
6.2	Employees located in Karnataka (number)	
6.3	Employees located outside Karnataka (number)	
7	Details of Banker:	

22.1.2 Application Form for Job Creation

Details			
Name of the Company			
KAVGC Registration No			
Name of individuals applying			
Which Incentive are you applying for:			
Employer Details (PF and ESI ID):			
ESI Details (continuous employment period of 2 years)			
Category	No. of Employees	Amount (paid on ESI)	Reference of supporting documents
Managerial			
Supervisor/Team Lead			
Engineers/Technical staff			
Unskilled			
Others			
Sub Total – I			
Category	No. of Employees	Amount (paid on PF)	Reference of supporting documents
Managerial			
Supervisor/Team Lead			
Engineers/Technical staff			
Unskilled			
Others			
Sub Total – II			
Grand Total (I + II)			

Category	Name	Employee UAN	Employee's contribution for 24 months			
			January	February	March	
Managerial						
Supervisor/Team Lead						
Engineers/Technical staff						
Unskilled						
Others						

22.1.3 Application Form for Early-Stage Startup Support Program

Details	
KAVGC Registration No.	
Name of the Company	
Name of Individuals Applying for Incentives	
Costs Breakdown	
Marketing Cost	
Leasing Cost	
Operational Cost	
Compliance Cost	
Brief Description of MVP (Minimum Viable Product)	

22.1.4 Application Form for Infrastructure

Details	
KAVGC Registration No.	
Name of the Company	
Name of Individuals Applying for Incentives	
Brief Detail about Project	
Hardware Equipment Purchases	
Machinery Expenditure (1)	
Machinery Expenditure (2)	
Machinery Expenditure (3)	
....	
Leasing Costs	
Grand Total	

22.1.5 Application Form for IP Creation and Protection

Details	
KAVGC Registration No.	
Name of the Company	
Name of Individuals Applying for Incentives	
Details of Intellectual Property Creation	
Type of IP Protection	Patent / Trademark / Copyright / Trade Secret / Other
Other (Specify)	
Filing Date	
Brief Description of IP	
Details of Inventors (Each profile to be mentioned)	
Name	
Designation	
Cost Breakdown	
Application Cost	
Attorney Cost	
Drafting Cost	
Search Cost	
Publication Cost	
Request for Examination Cost	
Annual Costs	
Other (Specify)	
Total Costs	

22.1.6 Application Form for Production Grants

Details	
KAVGC Registration No.:	
Name of the Company:	
Name of Individuals Applying for Incentives	
Constitution of the Company (please specify whether proprietorship/partnership firm/company etc.):	
Application for Grant (Highlight Applicable)	Animation Film Animation Series VR/AR/VFX Game Development International Production
Details of the Project & Scope of Work (as per attached contract)	
Date of Commercial Release of the Production / Contract Completion	
Total Project Cost	
Details of Qualified Expenditure:	
Production Costs:	
Manpower Costs:	
Other Costs:	

22.1.7 Application Form for Quality Assurance

Details	
KAVGC Registration No.	
Name of the Company	
Name of Individuals Applying for Incentives	
Details of Certifications	
Product/Service/Process for which Certification was required	
Certifying Agency	
Certification No.	
Date of Issue	
Period of Validity	
Details of Expenses	
Application Fee	
Assessment/Audit Fee	
Annual/License Fee	
Testing Charges	
Technical Consulting Charges	
Others (Specify)	
Total Expense Incurred	

22.1.8 Application Form for International Market Access

Details		
KAVGC Registration No.		
Name of the Company		
Name of Individuals Applying for Incentives		
Years of Operation		
Event Details		
Event Name		
Mode of Event		
Country/City/Venue		
Date of the Event		From _____ to _____
Are you the Lead organization for the event		
Partner Organization/Institution (if any)		
Activities		
Expected Output from the event/		
Cost Breakdown		
S.No	Items of Expenditure	Amount
1		
2		
3		

22.2 Annexure for Statutory Declaration

Declaration

I, (full name).....S/o,
D/o W/o, H/o

..... Managing Director/ Director/
Proprietor/ Partner/

Authorized Representative of
M/s.....

(Complete address), do hereby solemnly affirm and declare that all information and documents provided by me/us and the particulars stated above in the application are true and correct to the best of my knowledge, information and belief.

Place:

Date:

Signature and Seal

(Proprietor/Mg. Partner/Chief Executive/Managing Director/Authorized Representative)