





## SME DEVELOPMENT AND DCFTA IN GEORGIA

# VALUE CHAIN ASSESSMENT OF THE POST-PRODUCTION SECTOR IN GEORGIA

**Sector Study** 





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### Executive summary – Key Findings and Recommendations

#### (September 2016)

#### A) General Findings

- 1. The Post-Production sector may be able to improve its reputation and credibility with Georgian Production firms if the current market weaknesses and gaps are addressed.
- 2. With improved operations and technical skills, Post-Production firms can increase their market share to Georgia feature films (whose aggregate budgets have grown by 26.1% since 2013), documentaries and animations (which increased from none to 9 in 2015), and TV commercials (which is also increasing rapidly) produced in Georgia.
- 3. There is also potential to market Post-Production services in neighboring countries within the Black Sea region (i.e., Turkey, Ukraine, Armenia) and Central Asia.
- 4. There is a high commitment from the GoG to develop the overall video production industry, including the Post-Production sector.
- 5. However, the sector's output is not perceived by its client-base as meeting global quality standards for these services.
- 6. There are only several professionals that participate in providing Post-Production services for international projects.
- 7. Post-Production firms' personnel want to improve their technical skills; however, they do not expect to be able to upgrade their operations and technical skills independently without some form of external GoG/donor support programs or a dramatic increase in demand for Post-Production services.
- 8. The sector needs an injection of modern, digital technologies to improve its competitiveness. About 70% of initial start-up expenses are for equipment and software; however, there are currently no programs that assist Post-Production firms in purchasing new hardware and/or software.
- Development of the industry does not require major capital investments, such as for industrial or manufacturing investments. Instead, ongoing investments are primarily skills-based to build up the sector's human capital.

#### B) Strategy Recommendations for a Sustainable Post-Production Sector

- 1. The primary goal of GIZ and the GoG could be to increase the existence of skills development opportunities and platforms across the sector, according to international standards.
- 2. Similar to the GoG's Cash Rebate program that targets the Production sector and only indirectly the Post-Production sector, GIZ and the GoG could initiate a separate initiative for Post-Production services.
- 3. Reduce the tax burden for importing post-production studio equipment.
- 4. Promote representation of the Post-Production sector internationally.



#### C) Options for Implementation/Next Steps

- 1. Develop courses in sound, color correction, VFX, etc. in Georgia, with international trainers. By combining efforts with the GoG, GIZ could increase own development impact by organizing joint trainings and technical courses of study. These opportunities could include:
  - a. Co-financing trainings abroad (i.e., UK model, Creative Skills Development).
  - b. Arranging apprenticeships and internships in European studios.
  - c. Introducing cross-sectoral trainings for Production and Post-Production specialists (e.g., Post-Production process planning for producers and film directors).
  - d. Developing translations of online courses (similar to the Educate Georgia & Khan Academy project) into the Georgian language.
- 2. Introduce regular competitions with 10-15 finalists who will be eligible to participate in the above courses or in workshops and masterclasses organized by GIZ in Georgia and conducted by famous international VFX graphic designers held every 3-4 months.
  - a. Alternatively, all finalists may receive this as an award, with the "best in show" receiving the opportunity to participate in an internship at a VFX studio in Europe.
  - b. The primary goal of these competitions is to engage as many participants as possible and to offer small rewards to affect a broad-based increase in VFX technical skills throughout the Post-Production sector.
  - c. Create a website to announce the competitions, provide detailed information on qualifying criteria and the submission process, and receive submissions from VFX professionals (entry-level and experienced). This website could also serve as an information hub for VFX graphic designers in Georgia and/or as a contact point for potential clients outside of Georgia.
- 3. In addition to the existing Cash Rebate program, offer additional tax incentives not only to Production companies in Georgia, but also could be available to Production companies outside of Georgia to stimulate international contracts.
- 4. Introduce a 0% VAT benefit for the import of studio equipment, which would help to reduce capital expenditures for Post-Production studios and professionals.
- 5. Support the participation of Georgian Post-Production professionals at international festivals and fairs (e.g., Barcelona International Arts and VFX Fair).



#### Value Chain Assessment

#### A. Sectoral Context

#### **DEFINITIONS**

#### Post-Production Sector

- The Post-Production sector includes companies that prepare video and audio products for public distribution by conducting video editing and composition, music composition, sound editing and design, color correction and grading, animation, and other special visual effects services.
- Although closely associated with the film production industry, the Georgian Post-Production sector also provides video and audio services to other markets, including TV programs, TV and radio commercials, documentaries, animations, corporate communications, and internet media.
- Production firms that host in-house Post-Production services or firms/freelancers offering both production and Post-Production services are included in this value chain assessment.

#### Related Activities

- **Development:** prior to production, this includes the creative process of script development and initiating the production financing process. In Georgia, these activities are generally performed by small production companies and may include pre-sales of the product prior to production.
- Production: this includes the production of video products (i.e., feature films, documentaries, TV programs, commercials, animations, corporate communications, and internet media). In Georgia, these activities are generally performed by small production companies that either perform these services in-house or contract with freelance technical and artistic crews.
- **Distribution:** these activities include managing the arrangements for the public viewing of the final video and audio products. For example, distribution may include sales to cinema networks for feature films or the public viewing of feature films, short films, animations, and documentaries at international film festivals. For Georgian films, international distribution is still in its nascent stage and local distribution is limited by the diminished number of screens available.

#### **BACKGROUND**

Georgia has a long history and rich tradition in film production and post-production. Less than a year after the first commercial, public screening of a cinematographic film occurred in Paris on December 28, 1895 by the Lumière brothers, Tbilisi hosted its first public screening on November 16, 1896. Film theatres were constructed across Tbilisi by 1907 and in 1908, the pioneer of the Georgian film industry, Vasil Amashukeli, began producing documentary films. His famous 1912 documentary "Akaki Tsereteli's trip to Racha-Lechkhumi" was a watershed moment that stimulated rapid industry growth in both film production and in theatre construction. By 1910, Georgian films were so popular that theatres were built

<sup>&</sup>lt;sup>1</sup> Georgian National Film Center, website: www.gnfc.ge.



throughout Georgia's regional centres, including in Kutaisi, whose theatre hosted 450 seats and two orchestras.<sup>2</sup>

The Georgian film industry enjoyed robust growth and active film production throughout the majority of the 20<sup>th</sup> century, and numerous Georgian filmmakers were awarded prizes in international competitions. However, with the fall of the Soviet Union, the industry declined and contracted rapidly. In 1980, just two of the largest Georgian studios, Kartuli Filmi and Telefilmi, produced 20 full feature and television (TV) movies; by comparison, in 2015, there were only five feature films produced in Georgia. Similarly, there were about 300 theatre screens in 1980, which decreased to only 19 in 2014, not only indicating a lower production volume and a diminished capacity for local distribution, but also suggesting that there is a smaller market demand for films produced in Georgia.<sup>3</sup>

These developments and other negative market forces that have impacted the production industry have had a proportionate impact on the Post-Production sector, since Post-Production firms have been and still are highly dependent on domestic film and TV production. Fortunately, recent developments indicate positive trends within the industry and growth opportunities for firms engaged in Post-Production services, including:

- In 2015, the GoG's Enterprise Georgia and GNFC introduced a Cash Rebate Program, which began in January 2016, for feature film production in Georgia, which offers a 20% rebate of qualifying expenses and an additional 2-5% for including Georgian elements to film producers.
- Georgian filmmakers are contributing to a higher reputation and national image for the film industry through participation in international film festivals, such as the Cannes Film Festival, which featured four Georgian productions in 2016.<sup>4</sup>
- On February 24, 2015, Georgia joined the "Creative Europe Programme" in Brussels, making it the
  first Eastern Partnership country to join the program after hosting an Eastern Partnership
  Ministerial Conference in Tbilisi in 2013. This program offers potential funding for Georgian
  production firms, which will increase funding for Post-Production services.
- A small number of Georgian movies have recently begun international distribution (in the EU), increasing their access to foreign markets.
- Through the recently implemented EU initiative "Digital Single Market", Georgian filmmakers can
  access larger audiences, which can also stimulate an increased number of productions and,
  therefore, a potential increase in demand for Post-Production services.
- Georgian advertising companies are securing more orders from foreign companies due to their lower costs and high quality, which can also lead to additional demand for the Post-Production services.
- In 2015, there was a successful Bollywood production that filmed in Georgia, and there are two additional productions being planned for 2016.

<sup>&</sup>lt;sup>2</sup> National Filmography in Georgia, website: <u>www.geocinema.ge/ge/studia.php</u>.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> "Four Georgian filmmakers feature at Cannes Film Festival", Agenda.GE website: http://agenda.ge/news/57373/eng.



However, to understand the nature and scope of these opportunities, it is necessary to identify the current market players and services available in Georgia and to identify the opportunities and challenges present in the value chain.

#### INTEGRATED CHALLENGES TO THE ENTIRE VALUE CHAIN

The Post-Production sector does not exist in isolation as a stand-alone industry, but is embedded within the overall production processes for film, TV, and other media. In fact, the same challenges that restrict growth in the Production sector also have a negative follow-on affect that restricts growth in the Post-Production sector. For example, the most significant common challenges that negatively impact both the Production and Post-Production sectors include:

- Limited access to finance: Aside from marginal investment from private domestic and international investors, the primary source of funding for Production and Post-Production services is public financing (subsidized grants) from the Georgian National Film Center (GNFC), who provides funding for feature films, documentaries, and animated films (including funding for Post-Production services). This funding is very limited, with 2015 grants totaling EUR 2.3 million (about GEL 5.9 million), which is only sufficient to fund about four feature films averaging about GEL 1.5 million each. However, this amount has grown by 79% since 2013, when grants totaled only EUR 1.3 million (GEL 3.3 million), suggesting that the Government of Georgia (GoG) is increasing its promotional support for this industry.<sup>5</sup>
- Insufficient technical skills and lack of training: The technical skills of the "below-the-line" crews (including the Post-Production crews) are insufficient and lack proper training in modern digital techniques, processing software, and equipment. Since there is no strong Production and Post-Production vocational education programs, this represents a systematic obstacle that must be address to overcome the skill gaps of these staff members. Furthermore, due to the lack of qualified individuals to manage production and post-production processes at an international level of proficiency, Georgian directors often invite cameraman from Europe and send their film material for post-production to either Europe or the US.

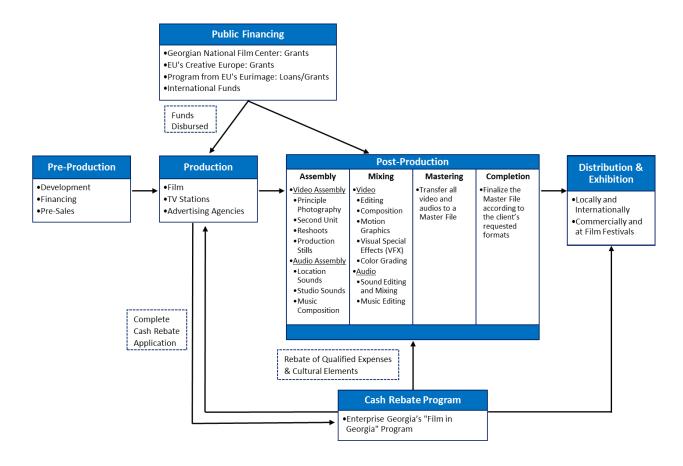
<sup>&</sup>lt;sup>5</sup> Georgian National Film Center website: www.gnfc.ge.



#### B. Mapping of the Value Chain

#### **VALUE CHAIN MAP OF GEORGIA'S POST-PRODUCTION SECTOR**

Figure 1 - Value Cain Map



As previously mentioned, the Post-Production sector is integrated within the overall video production industry, which begins with the pre-production activities of Development (concept design, script writing, etc.), Financing (through private and public sources), and Pre-Sales (primarily through local distribution networks). The Production stage of the Value Chain represents the direct clients of the Post-Production firms and consist primarily of film production firms (for feature films, documentaries, short films, and animations), TV stations (for TV series), and advertising firms (for commercials).

Based upon the critical role played by public financing in enabling overall production, particularly by direct grants disbursed through the Georgian National Film Centre, the Value Chain map demonstrates the disbursement of funds for both Production and Post-Production services. Additionally, the Enterprise Georgia's "Film in Georgia" Cash Rebate program provides rebates to Production firms for qualified Production and Post-Production services, up to 20% of total expenses, with an additional 2-5% of total



expenses rebated based on the inclusion of Georgian cultural elements and references within the final product.<sup>6</sup>

During Post-Production, there are four main processes related to finalizing the raw materials produced during the Production stage, which include assembly, mixing, mastery, and completion, as outlined in the Value Chain Map above. Common to all video products is the need for several Post-Production services including editing, sounds design and mixing, motion graphics and VFX, colour correction, and music composition. After the video products are completed, Production firms deliver them for either distribution commercially or for exhibition at domestic and international film festivals.

#### **SURVEY OF THE POST-PRODUCTION SECTOR**

In total, 22 respondents were interviewed during the survey of the Post-Production value chain, representing a response rate of 90%. These respondents included Post-Production firms, Production firms (film producers, TV stations, and advertising companies), representatives from the Georgian government, and other industry experts. Specifically, representatives of firms throughout the larger video production value chain were selected to participate in the survey to provide a comprehensive understanding of the challenges and opportunities available to Post-Production firms. For example, interviews were conducted for film producers and directors, audio engineers, VFX and colour corrections specialists, and other stakeholders like GNFC and Enterprise Georgia.

Of those interviewed, all the organizations except GNFC, Enterprise Georgia, and Kartuli Filmi were private companies, with 60% of the interviewed firms and organizations providing Post-Production services (at least on a basic level). In Georgia, there is no clear differentiation between Production and Post-Production firms. Most of the Production firms perform Post-Production services in-house. However, the level of quality of these services is not satisfactory. Quite often these firms provide a basic level of Post-Production services and then outsource it to other firms or freelancers in Georgia or abroad for completion.

#### **MAPPING OF CURRENT AND POTENTIAL CLIENT MARKETS**

According to numerous statements made during interviews, the markets served by Post-Production firms includes primarily the film production industry and advertising firms, with average revenues divided evenly as film production represents high-value contracts at a low volume and commercials represent low-value contracts at a high volume. Regarding the market for TV stations, Post-Production services are generally performed in-house for the majority of these services, and any outsourced Post-Production services (occurring rarely) are not sourced through Georgian firms, but, instead, from international Post-Production firms (i.e., Czech Republic, Germany, and the US).

From a geographic perspective, the vast majority of Post-Production services are provided domestically and make up approximately 90-95% of revenues generated. The remaining 5-10% of revenues are

<sup>&</sup>lt;sup>6</sup> A full description of the Cash Rebate program is included later in this report.

<sup>&</sup>lt;sup>7</sup> For the detailed list of the participants please see the appendix XXX.



generated primarily for projects in Azerbaijan, Kazakhstan, and Russia, with several additional small projects (i.e., commercials) with the US, UK, and France.

Based on responses from interviews, current fees collected for Post-Production services are much higher for feature films than for commercials. Similarly, the estimates of fees charged by international Post-Production firms in Russia, Ukraine, and the Czech Republic are significantly higher than in Georgia (up to 100% higher).8

Figure 2 - Average Fees for Post-Production Services for Feature Films<sup>9</sup>

Service (in USD)	Georgia	Russia, Ukraine, Czech Republic
Editing	500-5,000	50 per hour
Sound	8,000-12,000	10,000-15,000
Colour Correction/Grading	\$2,000 - \$10,000	\$5,000-\$20,000

Figure 3 - Average Fees for Post-Production Services for 30 second Commercials<sup>10</sup>

Service (in USD)	Georgia	Russia, Ukraine, Czech Republic
Editing	011-200	300-1,500
Sound	100-500	500-1,500
Colour Correction/Grading	300 -1,000	500-2,000

Based on interviewees' responses, in the future, the Post-Production sector may be able to improve its reputation and credibility with Georgian Production firms (including film producers and advertising companies) if the current market weaknesses and gaps are addressed. For example, the vast majority of respondents stated that if the technical skills of the Post-Production firms' employees improved and they were trained in new digital technologies and equipment, then there would be opportunities to expand its current level of services provided to its current markets. Specifically, respondents stated that over 70% of films and commercials produced in Georgia outsource at least part of their Post-Production needs to international firms outside of Georgia. If local skills, facilities, and equipment are improved, then Georgian Post-Production firms can attract more business from their current clients/markets in the film and advertising sectors, via expanding the scope of their offerings. However, the majority of employees at Post-Production firms have stated that they are "self-taught" and that they do not have the ability to purchase licensed software and the required digital equipment/facilities. Furthermore, they do not expect to be able to upgrade their operations and technical skills independently without some form of external government or donor support programs, given the low revenues generated by these firms, or a dramatic increase in demand for Post-Production services to pay for the additional investments.

If they are able to improve their operations and technical skills, Post-Production firms expect to be able to market their services in neighbouring countries within the Black Sea region (i.e., Turkey, Ukraine, Armenia) and Central Asia, since the market for Post-Production services is highly globalized and telework is common for many freelancers. Additionally, these firms believe that it will be easier to

<sup>&</sup>lt;sup>8</sup> The prices are based on quotations provided by interview and survey respondents.

<sup>&</sup>lt;sup>9</sup> Rate estimates included are based on interview responses with Post-Production firms.

 $<sup>^{10}</sup>$  Rate estimates included are based on interview responses with Post-Production firms.

<sup>&</sup>lt;sup>11</sup> As many agencies have in-house editors, it is difficult to separate costs related to editing from general payroll expenses.



penetrate these markets due to their cultural empathy and shared historical perspective with Georgia and due to the competitive pricing in Georgia compared to prices in Eastern Europe.

#### **INDUSTRY PERFORMANCE**

Based on the statements from respondents on the growth in the number and budgets of productions (for both the Production and Post-Production sectors), the overall industry has been growing at a moderate pace and has recently benefited from new international co-financing and from co-productions with international filmmakers. Additionally, budgets for feature films have also increased dramatically over the same time period, from GEL 850,000 per film in 2013 to about GEL 1,500,000 in 2016 (representing a total increase of 76.5% in three years). Assuming this higher rate for 2015 feature film budgets (given the multi-year nature of film production), the total value created for the industry for the five feature films in 2015 (GEL 7.5 million) was about 26.1% greater than the total value created by the seven feature films in 2013 (GEL 5.95 million).

Additionally, along with the Georgian government's increasing commitment in promoting the industry internationally, the amount of public financing has risen rapidly over the past four years, from GEL 1.7 million in 2011 to GEL 5.9 million, for a total increase of 251.6% (36.9% CAGR<sup>13</sup>).

Figure 4 - GNFC Grants, 2011-15 (in GEL)

	2011	2012	2013	2014	2015
<b>GNFC Grants</b>	1,672,000	2,478,301	3,068,207	3,000,000	5,878,000

Similarly, the total number of productions has risen from 2013 to 2015. Specifically, based on the 2013, 2014, and 2015 "Country Reports" for Georgia on the New Film Europe website, total films produced have increased by a total of 33% over the 2-year period. It is important to note that Georgian film productions have also diversified according to type, as seen in the table below:

Figure 5 - Estimated Number of Productions, 2013-15

	2013 <sup>14</sup>	2014 <sup>15</sup>	<b>2015</b> <sup>16</sup>
Features	7	7	5
Documentaries	0	3	7
Animations	0	0	2
Foreign and Co-Productions	8	0	6
Total	15	10	20

<sup>&</sup>lt;sup>12</sup> "Georgia Country Report 2013", Film New Europe website, <a href="http://www.filmneweurope.com/news/georgia-news/item/107294-georgia-country-report-2013">http://www.filmneweurope.com/news/georgia-news/item/107294-georgia-country-report-2013</a>.

<sup>&</sup>lt;sup>13</sup> Compound annual growth rate.

<sup>14</sup> Ihid

<sup>&</sup>lt;sup>15</sup> "Georgia Country Report 2014", Film New Europe website, <a href="http://www.filmneweurope.com/news/georgia-news/item/109750-fne-country-report-2014-georgia">http://www.filmneweurope.com/news/georgia-news/item/109750-fne-country-report-2014-georgia</a>.

<sup>&</sup>lt;sup>16</sup> "Georgia Country Report 2015", Film New Europe website, <a href="http://www.filmneweurope.com/news/georgia-news/item/111916-fne-country-report-2015-georgia">http://www.filmneweurope.com/news/georgia-news/item/111916-fne-country-report-2015-georgia</a>.



Currently, there are a number of films in Production or Development that either do require or will require Post-Production services. Specifically, a summary of the current projects in Georgia as of September 2016 that are receiving support from GNFC, and their relevant stage of production, are included in the table below, with detailed lists of the projects in the subsequent tables.

Figure 6 - Summary of Film Production Products in 2016

	Completed	Production	Post-Production	Projects	Total
Animation	1	0	2	2	5
Documentary	2	2	5	9	18
Feature	1	2	8	26	37
Total	4	4	15	37	60

Figure 7 - Status of Feature Films Being Produced in Georgia in 2016

#	Name	Category	Director	Producer	Stage
1	Dede	Feature	Mariam Khachvani	20 Steps Production	Completed
2	My happy family	Feature	Nana Ekvtimishvili & Simon Gross	Polare Film	Postproduction
3	Khibula	Feature	George Ovashvili	Alamdari	Postproduction
4	Gapikoeba	Feature	George Mgeladze	George Mgeladze-Katmandu	Postproduction
5	Ursus	Feature	Omar Shamatava	Studio O	Postproduction
6	Hostages	Feature	Revaz Gigineishvili	20 Steps Production	Postproduction
7	Andro	Feature (short)	Tornike Gogrichiani	Panionati	Postproduction
8	Niko	Feature (short)	Giga Baindurashvili	Refresh Studio	Postproduction
9	Anna	Feature (short)	Margalita Zubashvili	Focus Productions	Postproduction
10	Alien	Feature	Dimitri Mamulia	Millimeter	Production
11	The two	Feature (short)	Natia Gogaladze	Shota Rustaveli Theatre and Film University	Production

Figure 8 - Status of Animation and Documentary Films Being Produced in Georgia in 2016

#	Name	Category	Director	Producer	Stage
1	Jino	Animation (short)	Dado Kiknavelidze	Creative Production Union Lira	Completed
2	Listen to silence	Documentary	Mariam Chachia	Opiodoc	Completed
3	Bread & entertainment	Documentary	Zurab Inashvili	Independent Film Studio	Completed
4	A fisherman and a girl	Animation (short)	Mamuka Tkeshelashvili	20 Steps Production	Post-production
5	A frog in love	Animation (short)	Val Kharitonashvili	Alien Kind	Post-production
6	Platform Twisted Furniture	Documentary	Nino Orjonikidze, Ivane Arsenishvili	Artifact Production	Post-production



7	Palace of pioneers	Documentary	Anna Tsimintia	Matchhouse Film	Post-production
8	Mister Johnson	Documentary	Tamar Mshvenieradze	Studion Lokokina	Post-production
9	Thought	Documentary	Gela Kandelaki	Irakli Baghaturia	Post-production
10	Things	Documentary	Nino Gogua	Cinemark	Post-production
11	Talking about money	Documentary	Sebastian Winkels, Zaza Rusadze	Zazarfilm	Production
12	City of sun	Documentary	Rati Jebashvili	Oneli Film Association	Production

Figure 9 - Status of All Productions Currently in the Development Stage in Georgia in 2016

#	Name	Category	Scriptwriter/Author	Producer
1	Before the Dad comes back	Documentary	Mari Gulbiani	Midi Film
2	Terrorist	Documentary	Irakli Makharadze	Visual Art Centre
3	Two universes	Documentary	Shalva Schengen Nino Chutkerashvili	European Business Centre
4	The ring	Documentary	Shorena Tevsadze	Real I-T Films
5	The city PSU P	Documentary	Beso Solomonashvili	BissStudio
6	Invisible streams	Documentary	Tamta Khalvashi	Interdoc
7	Superfluous men	Documentary	Avto Chiaureli	Chiaureli Brothers Art Studio
8	A generation	Documentary	Anuki Burduli	Nino Koiava
9	Sizmarvizia	Feature	Paata Amonashvili	Tamar Skhvitaridze
1 0	Gaumarjos (Hello)	Feature	George Varsimashvili	Vars Studion
1 1	Dream come true	Feature	Zurab Inashvili	Independent Film Studio
1 2	Kosta's Office (Kantora)	Feature	Nino (Nana) Jorjadze Tamar Bartaia	Studio 99
1 3	Rugby Lelo	Feature	David Kemkhadze Tamar Sulamanidze	Pilots
1 4	The origin of lightning bugs	Feature	Salome Benidze	5 Persons Studio
1 5	Baliauri	Feature	Vazha Gigashvili, David Janelidze	Baliauri
1 6	Kakutsa	Feature	Mikheil Mosulishvili	Lira Production
1 7	The king	Feature	Irakli Solomonashvili	Nali
1 8	Rain on two banks/beaches	Feature	Zaza Khalvashi	Batumi Independent Movie Studio
1 9	Angry perfumer	Feature	Besik Solomonashvili	Biss Studio
2	Nation's Enemy	Feature	George Varsimashvili	Vars Studio
2 1	Ergeashva	Feature	David Kvartskhava	ABK Studio
2	Flight of a black swallow	Feature	Givi (Beso) Odisharia	Caucasian Filmodrome



#	Name	Category	Scriptwriter/Author	Producer
2	Asynchronous	Feature	Ekaterine Togonidze	Nike Studio
2 4	The gorge	Feature	Guram Odisharia	Alamdari
2 5	The big bear	Feature	Mikhail Mosulishvili	Lira Production
2 6	Citizen saint	Feature	Gia Alavidze Tina Kajrishvili	Artist
2 7	Caucasian Foxtrot	Feature	Irakli Shavliashvili Zurab Karumidze	Teix Film
2 8	Neighbors	Feature	Grigol Abashidze	Artism
2 9	Fourth Brighton	Feature	Levan Koghuashvili	Kino Iberika
3 0	Forty three 43	Feature	Dimitri Tsintsadze	Cinetech
3 1	Naame	Feature	Zaza Khalvashi	Batumi Indepentent Film Studio
3 2	Declined Numbers	Feature	Uta	Magnet Films
3	Horizon	Feature	Tinatin Kajrishvili	Gemini
3 4	Parade	Feature	Nino Zhvania	New Georgia Film
3 5	Zolemina	Animation (short)	Nino Samanishvili	Ketevan Janelidze
3 6	A pocket man	Animation (short)	Anna Chubinidze	Kvali XXI
3 7	Women that swim	Documentary	Anna Bukia	Gemini

Finally, based on estimates of the production of commercials in Georgia received from respondents, the sector is also growing rapidly in volume. Specifically, in 2015, there were about 190 commercials on Georgian television that were produced in Georgia and 260 for the first 8 months of 2016 (equivalent to an annualized number of 390), representing a significant increase over 2015. It is important to note that while this sector appears to be growing quickly, Post-Production firms must focus on providing Post-Production services to this sector at a high-volume to justify their marketing efforts since budgets for domestic Post-Production services for these commercials vary from GEL 1,000-4,000.

Despite the increased budgets and overall growth and higher diversification of productions, the overall financial performance of the Post-Production sector is unclear due to several factors that prohibit an accurate estimation of cash flows and profitability, including:

- All TV stations and the majority of film producers and advertising companies conduct most of their Post-Production services in-house, for which the cash flows are consolidated with overall production revenues and expenses;
- Similarly, over 70% of films and commercials are, at least in part, outsourced to international Post-Production firms, at varying degrees;

• The use of freelance contracted employees is prevalent throughout the industry, and the revenues generated for their services are normally classified as a payroll expense.

Still, it is important to note that the overall imports and exports of "Audiovisual and Related Services" of Georgia (including both Production and Post-Production services) from 2011 to 2015 have both increased, with exports increasing faster than imports. Despite a decline from the 2013 high of USD 6.97 million to USD 5.25 million in 2015, the 4-year CAGR was 6.1%, equal to a total increase over the same period of 26.5%. Imports of the same have increased at a 4-year CAGR of 5.5% for a total increase of 23.9% over the same period. This growth demonstrates a positive effect on the balance of payments for Georgia from exports of Production (i.e., international productions in Georgia and co-productions) and Post-Production services.



Figure 10 - Balance of Payments of Georgia, 2011-15 (USD millions)<sup>17</sup>

From January 1, 2016 to September 1, 2016, after the Enterprise Georgia, with the Ministry of Economy and Sustainable Development, introduced the "Film in Georgia" initiative's "Cash Rebate" program, there has been a total of five applications received, out of which three have finished the Production stage, one is in Production, and another one is in Development. Thus far, the Cash Rebate has assisted the Film in Georgia initiative to attract GEL 8,009,285, which will be spent on Production and/or Post-Production in Georgia. Furthermore, the Enterprise Georgia is in negotiations with several additional international production companies, with projects such as:

- "Machine". The whole movie was shot in Georgia, not just certain scenes. The Georgian firm, Betterfly, partnered with Indian producers "Abbas Mustan", Sia Trading Corporation, and Amit Tandon.
- Anthony Lucero's feature film "The Clown" starring Lily Collins, Pål Sverre Hagen, and Jean-Marc Barr is currently shooting in Tbilisi until October 2016. The Georgian firm Misty Dawn is providing support. Romanian Marius Panduru (Aferim! by Radu Jude, Hi Film) is the Director of Photography, while the South African and American rock star Dave Matthews will create the soundtrack.

<sup>&</sup>lt;sup>17</sup> National Bank of Georgia, BPM-6, https://www.nbg.gov.ge/uploads/banalceofpayments/bopbpm6eng.xls.

#### C. Other Georgian and EU Government Initiatives

In addition to the GNFC's grant programs, there are two primary funding initiatives that many companies participate in to obtain financing for the Production and Post-Production stages.

#### FILM IN GEORGIA'S CASH REBATE PROGRAM

Launched in January 2016, "Film in Georgia" is a new film industry incentive program offering a 20% cash rebate to Georgian and international Production firms for qualified expenses incurred in Georgia. As indicated on its website, this program "aims to support the development of Georgia's film industry". In addition to the 20% cash rebate, Production firms may qualify for an additional rebate of up to 5% if the video production promotes Georgia as a destination by meeting the program's "Cultural Test." 19

#### Eligibility Criteria<sup>20</sup>

- "International and local productions must be registered as legal entities in Georgia.
- Projects must lead to the production of a feature film, TV film, TV series or mini-series (pilot episodes are eligible), animation, documentary film, commercial, reality show, or music video.
- At least 50% of the total production budget should be in place at the time of application.
- Expenses must be directly related to the filmmaking process to qualify.
- If production qualifies for the rebate, a refund up to 1,000,000 GEL will be approved automatically. Projects requesting a higher rebate require special approval of the government of Georgia.
- Production in Georgia must be completed within 24 months after acceptance to the rebate program."

#### **CREATIVE EUROPE PROGRAMME**

Creative Europe is "the European Commission's framework programme for support to the culture and audiovisual sectors. Following on from the previous Culture Programme and MEDIA programme, Creative Europe, with a budget of €1.46 billion (9% higher than its predecessors), will support Europe's cultural and creative sectors."<sup>21</sup> Key to the Post-Production sector's development, Creative Europe provides funds for film production through its "International Co-Production Funds" initiative. The goal of this initiative is to provide "opportunities for funding to facilitate international co-productions and to strengthen the circulation and distribution of audio-visual works supported at the production stage." The program provides financial support for projects that satisfy the following requirements:

- Production of feature films, animations and documentaries, of a minimum length of 60 minutes, intended for cinema release;
- Implementation of a concrete distribution strategy to improve the circulation of the supported works.

<sup>18</sup> http://filmingeorgia.ge/about-cash-rebate/

<sup>&</sup>lt;sup>19</sup> Cash Rebate Program brochure, Enterprise Georgia, <a href="http://filmingeorgia.ge/sites/default/files/web\_triplet\_a4.pdf">http://filmingeorgia.ge/sites/default/files/web\_triplet\_a4.pdf</a>.

<sup>&</sup>lt;sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> https://ec.europa.eu/programmes/creative-europe/about\_en



#### **D. SWOT Analysis**

#### **STRENGTHS**

- Moderate growth rate of the production section of the Value Chain (as a pre-requisite for poststage expansion)
- •High commitment from the GoG to develop the overall video production industry, including the Post-Production sector.
- •There is a high desire by Post-Production firms' personnel to improve their technical skills.
- •Investments in the Post-Production sector are not capital intensive.

#### **OPPORTUNITIES**

- •Itroduce training and apprenticeship programs to develop a qualified labor force.
- •With increased quality, skills, and an incentive program, Georgia's Post-Production sector could become a regional hub.
- •The Post-Production sector can create jobs quickly.
- Post-Production firms can market their services internationally with little additional investment.

#### **WEAKNESSES**

- Lack of experience working at an international level of quality and technical skills.
- •Technology and software updates are needed.
- PP firms suffer from low level of common ground with Georgian filmmakers
- PP firms do not have strong linkages to international Production firms.

#### **THREATS**

- Delays in developing the Post-Production sector will force Georgian and international Production firms to continue to perform these services inhouse or to outsource them to international firms.
- •Low sector revenues may diminish further without additional promotional programs, resulting in additional company shrink.



#### E. Conclusions

Based on the qualitative and quantitative data collected throughout this Value Chain Assessment and the observations made during the interviews with Post-Production firms, Production firms, government organizations, and other industry experts, the following conclusions summarize the opportunities and challenges that currently exist in the Post-Production sector:

**Brief Sector Outlook:** Despite the general lack of official statistics on the sector, the data compiled in this analysis from industry experts (film, commercial, and TV producers; Post-Production firms) and other public sources (i.e., Film New Europe, GNFC newsletters) shows that there has been positive growth over the past few years, particularly since the introduction of the GoG's Film in Georgia program in 2013. For example, aggregate budgets for feature films have increased about 26.1% from 2013-15. Likewise, the number of documentaries and animations has also increased dramatically from none in 2013 to 7 documentaries and 2 animations in 2015.

Similarly, in addition to the 4 completed projects in 2016 so far, the current number of projects in production (4), post-production (15), and development (37) are also very high, suggesting a potential increase in demand for Post-Production services for 2016 and 2017. Furthermore, the significant increase in TV commercial production from 2015 to 2016 also suggests that this demand from this sector could also increase.

**Quality Standards.** Currently, the Post-Production sector's output is not perceived by its client-base as meeting global quality standards for these services. All, except one, of the respondents stated that Post-Production firms cannot provide high quality. As a result of this low quality, Georgian Post-Production firms require 'credibility upgrade', which, combined with the requirements of some co-production contracts, is a likely reason for ongoing outsourcing Post-Production services from international firms.

**Technical Skills.** The majority of people working in the Post-Production sector do not have any relevant formal education. As stated by the respondents in the interviews, the majority of the sector's professionals are "self-taught", referring to themselves as the "YouTube Generation". There are several reasons stated for this lack of formal education, including:

- The prices of training courses for a beginner Post-Production professional, it is difficult to pay USD 1,000 or more for individual training courses.
- Visa regulations it is difficult to obtain visas to participate in technical training programs in the US, UK, or Europe for Georgian citizens.
- Languages individuals' proficiency in English, French, or German may not be sufficient to complete studies in these languages.

However, there is a strong desire among the personnel at Post-Production firms to improve their technical skills, and many of the respondents requested additional training opportunities as their primary need for professional development. These same respondents also suggested co-financing training programs as a method to stimulate new skills acquisition.

**Lack of Experience.** As a consequence of underdeveloped technical skills, there are only several professionals that participate in providing Post-Production services for international projects. As respondents stated, participation in international projects is critical to building a pool of skilled professionals in Georgia.



**Technology and Facilities.** Based on interview responses, the Post-Production sector needs an injection of modern, digital technologies to improve its competitiveness. Accordingly, about 70% of initial start-up expenses are for equipment and software; however, there are currently no programs that assist Post-Production firms in purchasing new hardware and/or software. Due to the low revenues in the industry, it is not viable for the existing freelancers or companies to invest USD 50,000-100,000 for new equipment and software. Regarding facilities, currently there are no available specialized facilities for Georgian Post-Production professionals (e.g., a standard calibrated room for audio mixing/designer to be able to finalize all sound edits, which is why some professionals prepare 90% of the final work product in Georgia and complete the remainder in Prague at specialized facilities).

**Software.** Currently, the majority of the companies and freelancers use pirated software, which could become a problem if Georgian firms attract more European production companies for co-production.

Access to Finance. Industry revenues are small but growing. In Georgia, there are two main government agencies that provide financial assistance to filmmakers: Enterprise Georgia and GNFC. Oriented primarily on the Georgian market, revenues and turnovers of the Post-Production companies are small, limited their ability to service loans. Similarly, as service companies, they have very few long-term assets, which are required by commercial banks as collateral for any credit lines or long-term debt.

Access to Markets. Currently, Georgian Post-Production companies work primarily with Georgian clients. Further development of the Production sector will also stimulate development of the Post-Production sector, given that production companies will utilize the services of Georgian Post-Production firms. The Government of Georgia may further stimulate development of the industry by introducing more robust incentive programs for PP.

**Professional Education.** Based on the interview responses, there are only a few specialists that have received formal training in PP. Even though there are up to 10 educational institutions providing film industry-related courses, none of the respondents were able to list more than two of them, with the most responses being Shota Rustaveli Theatre and Film University & GIPA.



#### F. Recommendations

#### **DEVELOPMENT RATIONALE**

- On a global scale, creative industries are profitable and sustainable from the long-term perspective of economic development.
  - Example: "British Columbia's (population 4.61 million) film industry has an experienced crew base of 25,000–30,000 who are directly involved in film & television production. Combining the number of jobs that are directly generated by film & TV plus spinoff jobs, BC has grown from 33,890 FTE (full time equivalent) in 2013/14 to 42,430 in 2014/15. Over 80% of both direct and indirect jobs are located in Metro Vancouver."<sup>22</sup>
- Development of the industry does not require major capital investments, such as for industrial or manufacturing investments.
- The Georgian government's current commitment and support to the film industry and the future plans to construct a National Film Archive Centre present strong opportunities for growth. The latter could also become a boost for the further development of the Post-Production sector as it will create new jobs for sound, color, and other Post-Production specialties.
- Strengths of the sector include existing close connections between players in the industry, major players have experience of working together on several projects, and the labor force's desire to obtain further technical skills and qualifications.

#### **SKILLS DEVELOPMENT/EDUCATION:**

- GIZ and the GoG could support skills development in the industry. Options include:
  - Develop courses (e.g., for beginners and existing professionals) for Post-Production specialists in sound, color correction, VFX, etc. in Georgia, with international trainers. By combining efforts with the GoG, GIZ could increase own development impact by organizing joint trainings and technical courses of study. These opportunities could include:
    - Co-financing trainings abroad (i.e., UK model, Creative Skills Development).
    - Arranging apprenticeships and internships in European studios.
    - Introducing cross-sectoral trainings for Production and Post-Production specialists (e.g., Post-Production process planning for producers and film directors).
    - Developing translations of online courses (similar to the Educate Georgia & Khan Academy project) into the Georgian language.
- GIZ and the GoG could introduce regular competitions with 10-15 finalists who will be eligible to
  participate in the above courses or in workshops and masterclasses organized by GIZ in Georgia
  and conducted by famous international VFX graphic designers.
  - Alternatively, all finalists may receive this as an award, with the "best in show" receiving the opportunity to participate in an internship at a VFX studio in Europe, sponsored by GIZ. The award would necessarily require the internship participant to either return to Georgia and work in the Post-Production industry for 12-24 months or reimburse GIZ for the program costs.

<sup>&</sup>lt;sup>22</sup> "Profile 2015", Canadian Media Producers Association, <a href="http://www.cmpa.ca/sites/default/files/documents/industry-information/profile/PROFILE-2015-ENG.pdf">http://www.cmpa.ca/sites/default/files/documents/industry-information/profile/PROFILE-2015-ENG.pdf</a>.

- - The primary goal of these competitions is to engage as many participants as possible and to offer small rewards to affect a broad-based increase in VFX technical skills throughout the Post-Production sector.
  - Given the relatively low-budget nature of these activities, different competitions could be held every 3-4 months.
  - O Initial steps to be taken include the creation of a website to announce the competitions, provide detailed information on qualifying criteria and the submission process, and receive submissions from VFX professionals (entry-level and experienced). This website could also serve as an information hub for VFX graphic designers in Georgia and/or as a contact point for potential clients outside of Georgia (example: <a href="https://www.artstation.com/contests">https://www.artstation.com/contests</a> in Montreal, Canada, which is sponsored by the Canada Media Fund).

#### **ACCESS TO FINANCE:**

- GIZ and the GoG could initiate a separate initiative for Post-Production services:
  - In addition to the existing Cash Rebate program that stimulates film and TV production in Georgia, it is essential to also focus on the Post-Production sector and offer additional tax incentives not only to companies producing videos in Georgia, but also could be available to other Production companies outside of Georgia to stimulate international contracts. In doing so, the sector will be able to attract clients from other countries (assuming that an appropriate skills development program will be launched). Models for this initiative could include the New York State tax incentive program for Post-Production or the British Columbia's DAVE program.

#### **TECHNOLOGY**

 An additional incentive that the GoG could introduce is a 0% VAT benefit for the import of studio equipment (HS Code Group 085), which would help to reduce capital expenditures for Post-Production studios and professionals.

#### **ACCESS TO MARKETS**

- GIZ and the GoG could support the participation of Georgian Post-Production professionals at festivals and trade fairs (e.g., Barcelona International Arts and VFX Fair).
- Currently, there are no industry standards available for Georgian Post-Production firms. The New York State incentive program offers tax incentives only to licensed firms (ensuring that quality of the services offered and reputation of the state as a location for Post-Production is protected). A similar program could be applied in Georgia to stimulate professional development of industry players.

#### TIMELINE FOR THE IMPLEMENTATION

 These activities could be implemented immediately with a multi-year commitment from the GoG and a long-term goal of developing a sufficient pool of qualified personnel in the Post-Production sector.



"Building state-of-the-art infrastructure and developing a deep pool of skilled local talent are the keys to the long-term success of an area's entertainment and media industry. Atlanta, Toronto, and Wellington, New Zealand, exemplify the importance of long-term planning that builds on incentives and includes investment in infrastructure and training."<sup>23</sup>

#### • Stage 1:

- Skills development and continuous education to create a pool of skilled Post-Production professionals, who are able to work on international projects.
- Create an association (formal or informal) to support education and capacity building activities.
- o Support attendance of Georgian professionals at international fairs.

#### Stage 2:

- Government incentive programs.
- Tax incentives on Post-Production services provided in Georgia regardless of Production company's location.
- o VAT waiver for import of equipment.
- Support of substitution of pirated software with licensed versions.

#### **ADDITIONAL RESOURCES**

- <a href="http://www.pwc.com/ca/en/industries/entertainment-media/publications/film-video-tax-incentives-canada.html">http://www.pwc.com/ca/en/industries/entertainment-media/publications/film-video-tax-incentives-canada.html</a>
- https://vfs.edu/programs/film-production/curriculum
- <a href="http://filmingeorgia.ge/">http://filmingeorgia.ge/</a>
- http://www.filmneweurope.com
- <a href="https://vfs.edu/programs/film-production/curriculum.">https://vfs.edu/programs/film-production/curriculum.</a>

#### **Company Profiles**

To be included in the final version of the document.

<sup>&</sup>lt;sup>23</sup> Strategies for Growing the Pittsburgh Media Cluster, http://www.milkeninstitute.org/publications/view/730.



## Appendix I: International Models for Developing and Promoting the Post-Production Sector

#### A. British Columbia's "Digital Animation or Visual Effects" (DAVE) Program<sup>24</sup>

The British Columbia government approved a 2015 budget that includes new funding to expand the existing Digital Animation or Visual Effects (DAVE) tax credit to include post-production film activities. The expansion will be effective as of March 1.

#### **FILM AND TELEVISION TAX CREDIT**

The film and television tax credit is for eligible corporations that produce eligible film or video productions in British Columbia (B.C.). The credits are for domestic productions with qualifying levels of Canadian content.

The film and television tax credit program consists of five distinct tax credits:

- Basic tax credit
- Regional tax credit
- Distant location regional tax credit
- Film training tax credit
- Digital animation, visual effects and post-production (DAVE) tax credit

Changes to the film tax credit rates were announced on May 2, 2016. For productions with principal photography starting on or after October 1, 2016, the digital animation, visual effects and post-production (DAVE) tax credit rate will decrease from 17.5% to 16%.

Changes have also been made to the calculation of the regional and distant location tax credits for animated productions that start principal photography after June 26, 2015.

#### B. The German Federal Film Fund<sup>25</sup>

The German Federal Film Fund (DFFF) is a measure adopted by the Federal Government Commissioner for Culture and the Media (BKM) to strengthen the film industry in Germany. The BKM has commissioned the German Federal Film Board (FFA) with implementing the measure. The objective of the measure is to improve the economic framework conditions for the film industry in Germany, to preserve and promote the international competitiveness of enterprises in the film industry with the object of achieving long-term effects for Germany as a production location in conjunction with further effects on the macro-economy.

The particular objective of the measure is to facilitate the financing of films as a cultural good, for producers in Germany. The measure is aimed at enabling higher production budgets in order to further the artistic scope, the quality, attractiveness and hence the dissemination of films. At the same time the costs spent in Germany in connection with the production of films are to be increased, leading to a better utilization of the capacity of technical film businesses and providers of virtual effects. An

<sup>&</sup>lt;sup>24</sup> Description of the program is taken from the official British Columbia government website, http://www2.gov.bc.ca/gov/content/taxes/income-taxes/corporate/credits/film-tv.

<sup>&</sup>lt;sup>25</sup> Description of the program is taken from the official German government website, <a href="http://dfff-ffa.de/index.php?current-guidelines">http://dfff-ffa.de/index.php?current-guidelines</a>.



improvement in film financing for production companies and the existence of the corresponding technical infrastructure constitute the prerequisites for a German and European film culture which is both creative and successful in the long run.



#### Appendix II: Sample Curriculum for courses<sup>26</sup>

#### A. Audio Design:

#### Overview

- Film production process: roles of the participants
- Post-production: mechanism and workflow
- Synchronize audio to video and film record and edit location sound
- Integrate sound effects
- Record and edit ADR (replacement dialogue)
- Create and edit Foley effects
- Mix and edit music, create a mix for foreign distribution
- Archive and deliver a final mix

#### **Lesson 1: Introduction to Post Production**

- Audio Post Production Overview
- Assessing the Post Elements in a QuickTime Movie
- The History and Evolution of Sound for Film and Theater
- Basic Pro Tools Set Up for Post Production
- Importing a QuickTime Movie into Your Pro Tools Session

#### **Lesson 2: Post Production in Depth**

- The Process, Methods, Tools, and People of Production and Post Production
- Post Production Media
- Digital Audio File Formats
- Film and Video Formats and Applications
- Synchronization
- Ensuring that the SMPTE Reader in Pro Tools and QuickTime are the Exact Same

#### **Lesson 3: Location Sound Recording**

- The Process, Methods, and Tools of Location Sound
- Introduction to the Location Sound Crew
- In Depth Look at Transfers
- Reviewing and Assessing the Location Sound Schedule for a Feature Film

#### **Lesson 4: Working with SFX and SFX Libraries**

- Introduction to Sound FX and SFX CD
- Transferring SFX to Computer and Managing Data with Workspace
- Spotting SFX
- Importing and Creating a Palette of SFX for a Project

<sup>&</sup>lt;sup>26</sup> https://online.berklee.edu/courses/audio-post-production-for-film-and-tv#!syllabus



- Backgrounds and Room Tones
- Spotting/Identifying Backgrounds for a QuickTime Movie
- Spotting, Editing, and Assembling SFX and Backgrounds for a QuickTime Movie

#### Lesson 5: Production Dialogue and ADR/Dialogue Replacement

- Introduction to Production Dialogue and ADR
- Setting Up a Pro Tools Session for ADR
- Production Dialogue and Checker Boarding within Pro Tools
- Presentation of ADR with regards to Production Dialogue
- Identifying/Spotting Expletives in a QuickTime Movie and Listing Them on the ADR Cue Sheet
- Preparing Physical Studio Space for Voice Recording
- Recording Voice Over for Announcer in a QuickTime Movie

#### **Lesson 6: Identifying and Creating Foley SFX**

- Introduction to Foley
- Preparing a Pro Tools Session for Multiple Passes of Foley FX
- Spotting Foley and Creating Cue Sheets
- Spotting and Preparing to Record Foley for a Simple Scene
- Preparing a Physical Studio Space for Foley Recording
- Directing and Recording a Foley Session
- Recording Spotted Foley for a QuickTime Movie

#### Lesson 7: Temp and Source Music Editing for Film and TV

- Introduction to Music Editing
- Assessing the Music Elements of a QuickTime Movie
- Presentation of Temp and Source Music
- Placing Temp and Source Music in a QuickTime Movie
- Techniques for Editing Temp Music
- Choosing from the Music Provided and Placing/Editing Temp and Source Music for a QuickTime Movie

#### **Lesson 8: Mixing Music for Film and Television**

- Introduction to Score Music and the Participants
- Creating a Pro Tools Template for Mixing Music in Stems
- The Process of Score Mixing
- Identifying Music Score Music in the QuickTime Movie and Note the Pre-Records Used with the Orchestra
- Using Pro Tools as a Platform for Recording and Mixing Music for Film and Television
- Applying the Pro Tools Music Mixing Template to the Score Provided and Set Up for a Mix
- Mixing the Music Score Elements for a QuickTime Movie

#### Lesson 9: The Pre Dub/Temp Mix



- Assessing the Post Production Elements for a Movie Clip Prepared by Editorial (Foley, SFX, Backgrounds, Dialogue, ADR, Walla, Music Score, and Source)
- Interview with Three Working Professionals on the Applications and Benefits of Pre Dubs
- Trimming, Editing, and Leveling to Clean Up the Post Production Elements for a QuickTime Movie
- Track Organization Techniques
- Pre Dub (Editing, Cleaning, Organizing, and Creating a More Manageable Track Count) for the Elements of a Quick Time Movie

#### **Lesson 10: The Final Dub**

- Introduction to the Final Dub and Presentation of Dub Stages Big and Small
- Templates for Different Scenarios
- Creating a Stereo Template for a Final Film Mix
- Plugins for Mixing Dialogue, Music, and Effects
- Augmenting the Template for Dialogue, SFX, and Music Units
- Introduction to Advanced Templates
- Creating an Advanced Template for a Final Dub
- Creating a Final Mix for the Elements for a QuickTime Movie
- Advanced Pro Tools Template Creation for Final Dubs
- Creating a Final Mix for a QuickTime Movie

#### Lesson 11: The M&E Mix (Music and Effects Mix for Foreign Distribution)

- Introduction to the M&E
- Identifying and Documenting Any Discernible English Dialogue from the Music and Effects Stems
- Different M&E Scenarios, Situations, and Techniques
- Effectively Removing Any Discernible English Dialogue from the Music and Effects Stems
- Mix Techniques Used to Breathe Life Back into the M&E
- Identifying and Documenting Holes in the Mix Created by the Lack of Production Dialogue
- Replacing/Recreating All Discernible English in Music and Effects Stems/Gap Filling Techniques
- Creating an M&E Mix from the Print Master and Stems from Lesson 10

#### **Lesson 12: Delivery and Archiving**

- Deliverables, Formats, and Deadlines
- Preparing Deliverables in Pro Tools
- Testing
- Verifying Functionality Deliverables
- Final Implementation and Delivery
- Preparing Sound Assets
- Delivering the Print Master, M&E, and Stems of a QuickTime Project and Verifying and Finalizing
   Final Audio Paperwork



#### B. Color Correction<sup>27</sup>:

#### **Course Schedule**

Please note: This is not a hands-on practical workshop, but rather a seminar-style/discussion-based exploration of colour grading and its potential.

#### **Day One**

Topics covered include:

- Introduction: What does a colorist do? Is grading a technical necessity?
- A Short History of Color Grading and Enhancement: How today's grading technologies and techniques have developed.
- Digital Motion Picture Cameras overview.
- RAW Camera workflow and necessity of color grading.
- Effects of Color: Examples of correction, enhancement and effects.
- Getting Started: What are the essential tools needed?
- Taking It Further: A professional approach.
- Grading Suites and Theatres: When should you use them? Are they all the same?

#### **Day Two**

Day two will concentrate on two different case studies.

- BRIDGE by Amit Ranjan Biswas is a low budget indie feature shot on Red. The film was finished by Dado to a much higher standard than the budget would originally allow. Find out how this was done and learn about the workflow, from shoot to the final 4K Digital Cinema master.
- ABSOLUTELY ANYTHING by Terry Jones is a big budget feature film shot on Alexa that takes full
  advantage of modern workflows, tools and techniques. Explore the grading process from shoot to
  finish, and discover to what extent the process was the same for both features.
- See more at: <a href="http://lfs.org.uk/workshops/lfs-workshops/250/introduction-to-digital-color-grading#sthash.yzkD2h9j.dpuf">http://lfs.org.uk/workshops/lfs-workshops/250/introduction-to-digital-color-grading#sthash.yzkD2h9j.dpuf</a>

<sup>&</sup>lt;sup>27</sup> http://lfs.org.uk/workshops/lfs-workshops/250/introduction-to-digital-colour-grading



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